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CANADA AT WAR

A Summary of
CANADA'S PART IN THE WAR

Revised to December 1st, 1941



Issued by the Director of Public Information, Ottawa, under authority
of the Hon J. T. Thorson, Minister of National War Services

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SOME SALIENT FEATURES OF CANADA'S WAR EFFORT EXPRESSED IN TERMS OF UNITED STATES POPULATION OR NATIONAL INCOME

The population of the United States is about eleven times that of Canada, and it has been estimated that in the present fiscal year the national income of the United States will be about fifteen times that of Canada. A true picture of the war effort of any country can only be obtained when that effort is considered in relation to potential resources. For the convenience of United States readers, therefore, the following salient features of Canada's war effort are presented in round figures, in terms of United States population or national income. Figures relating to man-power are translated in terms of population, figures relating to money in terms of national income.

	Canada	In United States Terms
Number of men enlisted for service anywhere in Navy, Army and Air Force....	More than 360,000*	About 4,000,000
Sailors, soldiers and airmen overseas.....	More than 150,000	About 1,600,000
Number of new wage-earners since outbreak of war.....	750,000	8,475,000
Money spent on war (first two years)—including financial aid to Britain.....	\$2,183,000,000	\$32,745,000,000
Money being spent on war this fiscal year (April 1, 1941, to March 31, 1942)—including financial aid to Britain.....	\$2,350,000,000	\$35,250,000,000
Cost to Canada of British Commonwealth Air Training Plan (for three years).....	\$. 531,000,000	\$ 7,965,000,000
Total Value of Canadian exports in first two years of war..	\$2,579,000,000	\$38,685,000,000
Value of Canadian products, including war supplies and equipment, sent to Britain in first two years of war.....	\$1,071,000,000	\$16,065,000,000
Value of Canadian products to be sent to Britain during present fiscal year.....	\$1,500,000,000	\$22,500,000,000
Estimated total of taxes (Federal, Provincial and Municipal) to be collected in present fiscal year.....	\$1,850,000,000	\$27,750,000,000
Money loaned to Canadian Government by Canadian people since outbreak of war..	\$1,480,000,000	\$22,050,000,000

*See note on page 8

HOW THE WAR HAS INCREASED INCOME TAXES IN CANADA AND THE UNITED STATES

Both Canada and the United States have greatly increased their income taxes to pay for national defence. The following table illustrates the extent to which incomes are now being taxed in these North American countries:

TAX TO BE PAID ON THIS YEAR'S INCOME IN THE UNITED STATES AND IN CANADA BY A MARRIED COUPLE WITH NO DEPENDENTS

Income	UNITED STATES Income Tax	CANADA Income Tax	Total Including National Defence Tax*
\$ 1,600	\$ 6	\$ 15	\$ 71
3,000	138	250	355
5,000	375	750	925
10,000	1,305	2,580	2,930
20,000	4,614	7,330	8,030
50,000	20,439	24,485	26,235
100,000	52,704	56,895	60,395
500,000	345,084	376,140	393,640

*Levied on total income without deductions.

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EXPLANATORY NOTE

This booklet is intended to provide information about the nature and extent of Canada's war effort. It is revised monthly and contains the most recent available facts and figures and every effort is made to make the booklet as full and timely as possible. However, certain facts which must be concealed from the enemy are omitted or appear only as approximations. In this issue, certain topics which have been fully treated in previous issues are omitted to make room for new material.

Facts and figures are not set down in any spirit of complacency. On the contrary, they are presented on the assumption that until victory is won, conscientious Canadians will never be satisfied that they have done enough. It is hoped that the booklet will assist this spirit of determination. A man fights better and works harder if he knows something of what his fellow-countrymen, in their many various lines of work, are doing for the cause they have all embraced in common. He will be able to co-ordinate his own efforts intelligently with those of others, if he has some idea of the broad lines of Canada's war endeavour.

This booklet has been written for Canadians and for all others who are interested in what Canada is doing.

GOING TO WAR

"As soon as the cloud on the horizon, no larger than Hitler's hand, resolved itself into the storm of conflict, we determined that we would not wait until the enemy was at our gates. We went to meet him at sea, in the air and on land."

Prime Minister Mackenzie King in a speech to the Associated Canadian Organizations of New York City on June 17th, 1941

"Every conceivable means by which freedom can be crushed is to-day being employed by Nazi Germany. We may expect that for some time yet her might will continue its sway, and violence and bloodshed on a growing scale be a part of the human lot. This is an appalling prospect. Until its ghastly potentialities are squarely faced in all quarters of the globe, the sufferings of humanity may be expected to increase."

Prime Minister Mackenzie King to the House of Commons on November 2nd, 1941

Canada has entered her third year of war. In September, 1939, four days after Britain began hostilities, the Canadian Parliament assembled and the Government announced that it advocated placing Canada in the war at the side of Britain and her Allies. The Dominion was completely at liberty to make war or to abstain from making war, and it was Parliament's duty to decide whether or not to support the Government in its decision. After the proposal had been freely discussed for two days, the Government was accorded Parliament's support by a nearly unanimous division, and on the following day, September 10th, 1939, the King, at the request of the Canadian Government, declared that a state of war existed between Canada and Germany. As L. W. Brockington, until recently the Official Recorder of Canada's War Effort, put it in a speech at Toronto on September 18th, 1941, "King George VI of England did not ask us to declare war for him; we asked King George VI of Canada to declare war for us." When Italy began hostilities on June 10th, 1940, Canada at once declared war on her.

THE ARMED FORCES

*"Lay the proud usurpers low!
Tyrants fall in every foe!
Liberty's in every blow!
Let us do or die!"*

Robert Burns

NOTE: The following figures are necessarily approximate as statistics relating to the strength of the forces are of vital interest to the enemy. They give a fair idea of the strength of Canada's armed forces to-day.

Voluntarily Enlisted for Service Anywhere

Navy.....	More than 27,000
Army.....	More than 240,000
Air Force.....	More than 93,000
TOTAL.....	More than 360,000
Number Who Have Volunteered to Serve Anywhere.....	More than 500,000

Already Serving Outside Canada

In All Three Forces.....	More than 150,000
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Enlisted for Service in Canada

Reserve Army Liable to be Called Out for Home Defence.....	More than 145,000
Men Conscribed for Duration of War for Service in Canada.....	More than 15,000

In the six months between May and November of this year there were more than 100,000 voluntary enlistments for service anywhere in the Canadian armed forces. This is indicated by the following figures:

Recruited Between May and November, 1941

Navy.....	11,000
Army.....	59,000
Air Force.....	35,000
TOTAL.....	105,000

The exact disposition of Canada's forces is a military secret. Enough is known, however, to indicate that they are in strategic positions in many parts of the world and

are already playing or are prepared to play their part in meeting the enemy. Ships of the Royal Canadian Navy are to be found in widely scattered parts of the world. Canadian soldiers garrisoned Iceland for over a year and helped to build its defences; Canadian sappers are doing important work at Gibraltar, and other Canadian troops are in Newfoundland, the West Indies, Hong Kong and the British Isles. Canadian airmen have fought over Britain, Europe, the Mediterranean area and Russia.

The Navy

"The prospects of . . . strengthening (escort forces) are encouraged by the news from Canada of the truly remarkable developments of the Royal Canadian Navy . . . These are efforts which should not go unnoticed . . . ; they are harbingers of even greater things and they show the awakening of the maritime spirit of that great Dominion."

Admiral Sir Henry Richmond
in the "Fortnightly Review" for
September, 1941

The Royal Canadian Navy has grown speedily, as is indicated by the following figures:

	<i>Pre-war</i>	<i>To-day</i>
Ships.....	15	More than 300
Active service strength.....	1,800	More than 27,000

Ships

When the Royal Canadian Navy went into action in September, 1939, it mustered a mere fifteen vessels, six of them destroyers. Britain needed all her destroyers, and Canadian shipyards had never built these complex fighting ships and were not equipped to do so. In order that Canada might as quickly as possible play her full part in the war at sea, it was decided to convert to naval use as many suitable ships as could be acquired and to build speedily as many small ships as Canadian yards could undertake. Since that time the Canadian navy has increased its strength in ships to something over 300. Yachts and larger ships have been converted, destroyers have been acquired from the United States and from Britain, and Canadian shipyards have been turning out a variety of craft.

The Royal Canadian Navy to-day consists mainly of small ships—destroyers, a considerable number of

corvettes, minesweepers and "submarine chasers", and a fleet of smaller craft such as fast motor torpedo boats. It has, in addition, "auxiliary cruisers" of considerable tonnage. In recent months an average of one corvette every few days has been turned out and the Canadian navy has been taking on new ships at the rate of two a week. Modern destroyers are now being built in Canada and in Britain for the Royal Canadian Navy. By March, 1942, it is expected that Canada will have a navy of 400 ships.

Corvettes, which are perhaps the most important ships in the Royal Canadian Navy to-day, are efficient fighting vessels. Although not so formidable as destroyers, they have certain advantages—they can be built in quantity and quickly in Canada, and they carry much smaller crews than destroyers. Corvettes are designed for convoy work and patrols. They have been given speed sufficient to enable them to engage in anti-submarine work most successfully. For this form of warfare they are armed both with guns and depth-charge equipment. In addition to their speed, they have a long cruising range, and their construction permits them keeping the seas in any weather. To cope with attacks from the air, they are also armed with anti-aircraft guns.

Men

R.C.N. personnel is the nucleus of Canada's Navy, but since the outbreak of war recruits enlisted by the R.C.N.V.R. (Royal Canadian Naval Volunteer Reserve) have been mobilized in increasing numbers. They now constitute the largest portion of the Navy's strength. Most of them are landsmen who for the first time are learning the craft of the sea and the lore of ships. On November 4th, 1941, the Naval Minister, Hon. Angus Macdonald, said, "Men are being taken into the naval service as rapidly as they can be trained and as rapidly as ships can be provided for them. . . . We have a waiting list of 4,000 men." R.C.N.R. personnel, experienced sailors, have also been enlisted by the Royal Canadian Navy, and on the Pacific Coast the Fishermen's Reserve is doing a quiet but important job. At the outbreak of war this Reserve, organized in the spring of 1939 in preparation for possible emergencies, was called immediately into service. It was composed mainly of British Columbia deep-sea fishermen, who brought with them their sturdy fishing

craft for minesweeping and patrol work. Now they are being provided with a new type of patrol ship specially built for the Royal Canadian Navy.

Training Canada's Sailors

Training of men for the Royal Canadian Navy is begun in twenty R.C.N.V.R. divisions from coast to coast. From these divisions they are sent to coastal establishments for intensive training. Here they are steadily made ready for sea. Later, when they have gained experience, they may qualify in one of the many special branches of Canada's modern navy. In addition, special technical training is given selected men in several centres.

The following table indicates the training being given naval recruits in various parts of Canada:

R.C.N.V.R. Divisions (recruiting and preliminary training of naval volunteers)	20
Training Establishments	2
Technical Training Centres	4

Work of the Navy

On November 4th, Mr. Macdonald told the House of Commons that Canadian sailors are "to be found in every sea of the world. The great majority of them, of course, are to be found in Canadian ships but several hundred of them have been lent to the Royal Navy. . . . Our ships are to be found in widely scattered parts of the world. . . . At this moment Canadian ships are separated by 10,000 miles of land and sea. Some of them are on convoy work; some are protecting the shores of this country, and still others are co-operating with the Royal Navy. . . . Two hundred ratings of the Royal Canadian Navy are now serving as gunners or in some similar capacity on defensively equipped merchant ships." Young Canadians with special scientific training have for some time been doing special work with the Royal Navy. Two of them have been killed in battle.

Convoy Duty

The Royal Canadian Navy has played a very important part, since the outbreak of war, in the convoying of Canadian and American supplies to Britain. On November 4th Mr. Macdonald said, "the work of con-

voying both freight ships and troop ships still continues to be one of the most important tasks of the Canadian Navy. How important is this work to the success of our cause, and how vital it is to the very life of the British Isles are matters that are beyond dispute. It is a source of gratification to be able to say that not one ship proceeding in troop convoy from these shores to Great Britain has lost a single passenger on the way. So far as freight convoys are concerned, no fewer than 7,000 ships have left Canadian shores for Great Britain since the outbreak of the war, carrying 42,500,000 tons of cargo to that island. A great deal of the work of convoying these ships and their cargoes has fallen to the Canadian Navy. I shall not attempt to specify how this work is allotted, where the duty of one service ends and another begins, but it is true to say that a great part of it, and a very hazardous part, falls to the care of the men of the Canadian Navy."

Protecting Canada

The Royal Canadian Navy has successfully protected Canada's shores and ports. Its ships patrol the Dominion's coasts day and night. On the Pacific are more than 5,000 miles of mainland and island coastline over which to keep "watch and ward," and the Atlantic seaboard sets its own peculiar problems.

Working with the Royal Navy

Ships and men of the Royal Canadian Navy have co-operated with the Royal Navy in many parts of the world. Early in the war they helped to convoy Australian troop ships to battle areas. They operated off the French coast during the evacuation in June, 1940. Canadians did notable work at Boulogne and Dunkirk, and later in the evacuations of Greece and Crete. In the waters around the British Isles Canadian destroyers and corvettes have played their part in protecting the approaches to the beleaguered islands. Early in 1941 a Canadian destroyer helped to rescue 857 survivors from the "Arandora Star" after she had been torpedoed. In the South Atlantic and in the Pacific the Canadian Navy has helped to impose a blockade on enemy ships. The Navy has captured five enemy vessels and caused others to be scuttled.

The Navy has sunk enemy submarines. On November 4th the Naval Minister told the House of Commons, "Enemy submarines have been frequently attacked by our ships, mainly by depth charges, and while it is not possible or proper to give the details of these actions, it may be said with certainty that some of the attacks have been completely successful and that more than one German U-boat now lies at the bottom of the sea as a result of the vigilance and skill of men of the Canadian Navy." Late in November it was announced that two Canadian corvettes had sunk a German submarine in the North Atlantic. One corvette attacked with depth charges, forcing the U-boat to the surface. The other opened fire, but after a single round had been fired, the submarine's crew abandoned their ship, which then sank. The corvettes picked up 47 survivors.

Shore Establishments

Canadian naval shore establishments also play their part. Dockyards work efficiently at the task of keeping the fleet at sea. In key centres naval officers carry on the complex business of naval plans and operations, linking the Dominion's activities to the world-wide operations of the Empire's naval forces and performing the multitude of exacting tasks which must be carefully executed if Canada is to play her full part in protecting the Empire's commerce.

This has involved the most careful organization of the Naval Control Service on Canada's east coast. Even before the actual outbreak of war the Navy had its machinery ready for the guidance and guardianship of the merchant service. Under the general title "Naval Control" the incomings and outgoings of merchant ships were under constant supervision. Six days after hostilities had commenced, the first convoy steamed into the Atlantic from a Canadian port. So began a service which neither the perils of war nor the hazards of weather have been able to interrupt.

Large as was this part of the work of the Naval Control Service, it was but one of the many duties undertaken. Before convoys could assemble, the ships which formed them had to be loaded and made ready for sea, often at ports entirely apart from the one in which the final rendezvous was to be made. Naval control officers in these

different ports, working against time and fitting the ships in their care into the composite picture, as if they were pieces in a mammoth jig-saw puzzle, kept their ships moving on schedule and the convoys crossing the ocean according to plan. Incoming ships were routed to the ports where cargoes, for which they were especially suited, awaited them. The difficulties which beset such a mammoth task were not lessened by the fact that the convoys included ships of all the allied nations, with the consequent differences of language and customs to be overcome. But the ships kept moving.

Losses

The Navy's work has not been carried out without loss, H.M.C.S. "Fraser" was sunk on a misty night in June, 1940, during the course of operations off the coast of France. Ships were running without lights to avoid danger of enemy attack, and "Fraser" was cut in two by a much larger ship. H.M.C.S. "Restigouche" rescued most of her crew. H.M.C.S. "Margaree", on convoy duty, suffered a similar fate somewhere in the Atlantic in the autumn of 1940, and most of her crew were lost. Thirty-one Canadians were serving on H.M.S. "Jervis Bay" when she went down protecting her convoy from the guns of a German warship in November, 1940. The most recent loss suffered by the Royal Canadian Navy was the sinking of H.M.C. corvette "Levis" by enemy action, which was announced on September 27th, 1941. Because of the need for secrecy concerning naval operations, no details were disclosed by Naval Headquarters beyond the fact that 17 of her crew were lost. A total of 362 officers and men have been killed on active service.

Citations and Decorations

The following awards to men of the Royal Canadian Navy have been announced:

Order of the British Empire.....	2
Distinguished Service Cross.....	7
Distinguished Service Medal.....	3
George Medal.....	1
Mentioned in Despatches.....	28

Citations accompanying the awards contain the following typical phrases—"for meritorious service at sinking of H.M.C.S. 'Fraser' . . . for enterprising action against

enemy submarines . . . for good services in successful operations which prevented war material from falling into the hands of the enemy . . . for courage and resource in withdrawal of troops . . . untiring and fearless in his direction of the employment of fire and rescue party . . . for good services during an air attack . . . for courageous conduct on H.M.S. 'Jervis Bay'."

The Army

"One gets a marvellous thrill to see the Canadian boys here standing on guard . . . It is difficult to find words to express the thankfulness inspired by this great act on the part of the sons of Canada for the preservation of the British family of nations."

Rt. Hon. Ernest Bevin, speaking in London, England, on February 16th, 1941.

The Canadian Army has expanded greatly since the outbreak of war, as is indicated by the following figures:

	<i>Pre-war</i>	<i>To-day</i>
Voluntarily Enlisted for Service Anywhere.....	4,500	More than 240,000*
Enlisted for Home Defence.....	55,000	More than 160,000*

*See also page 8.

The Army Overseas

The Canadian Active Army is a force of more than 240,000 volunteers who have enlisted for service anywhere for the duration of the war, and for as long thereafter as the Government may require. About half of them are now overseas. Some Canadian soldiers are in Newfoundland, the British West Indies, Gibraltar and Hong Kong, and a large number are in Britain.

During November fresh contingents of Canadian troops arrived overseas—one in the Far East, the other in Britain. In announcing the arrival of a large Canadian force at Hong Kong, Prime Minister Mackenzie King said that "defence against aggression, actual or threatened, in any part of the world to-day is part of the defence of every country which still enjoys freedom," and that the dispatch of Canadians to the Orient was "in accordance with this view."

The final contingent of the Fifth (Armoured) Division arrived in Britain late in November in the largest troop convoy ever to reach the British Isles. It took several

days to disembark the contingent. Thousands of Canadians in battle kit poured ashore and piled into trains which took them to training camps near the defence lines of the Canadian Corps.

The Canadian Corps in Britain guards vital sectors. Canada now has in Britain the First, Second, Third and Fifth (Armoured) Divisions, a tank brigade and a large force of ancillary troops. Speaking in the House of Commons on November 4th (before the Fifth Division had arrived overseas), Hon. J. L. Ralston, the Minister of National Defence, said, in the course of an account of his recent visit to Britain, "We think of the Canadian Corps as consisting of three divisions and an armoured tank brigade, to be joined before long by the Fifth (Armoured) Division—that, along with the artillery regiments, the signals, the engineers, ordnance, and army service corps units. But as a matter of fact we have supplied many units which would be needed to work with the corps when that corps becomes part of an army. . . Our forces in the United Kingdom consist not merely of three divisions but of over 300 units of various types . . . At the present time the Canadian Corps has developed almost from a corps to an army by reason of the line of communication troops and the corps and army troops which have been added to it. . . To-day there are fifty per cent more corps and army troops in the Canadian corps of to-day, although no battles have been fought, than there were in the Canadian corps of 1915 to 1918."

The Canadian Corps has been kept in Britain thus far because the British Government considers it an essential factor in the defence of Britain, which is of paramount importance to the democratic cause. On September 4th, 1941, speaking to the Canadian Prime Minister at the Mansion House, London, Rt. Hon. Winston Churchill, the British Prime Minister, said, "You have seen your gallant Canadian corps and other troops who are here. We have felt very much for them that they have not yet had a chance of coming to close quarters with the enemy. It is not their fault; it is not our fault; but there they stand, and there they have stood through the whole of the critical period of the last fifteen months at the very point where they would be the first to be hurled into a counter-stroke against an invader. No greater service can be rendered to this country, no more important military duty can be

performed by any troops in all the allies. It seems to me that although they may have felt envious that Australian, New Zealand and South African troops have been in action, the part they have played in bringing about the final result is second to none."

Note:—For a description of the work of the Canadian Corps since the arrival overseas of the First Division in December, 1939, see pages 14-16 of November issue of "Canada at War," or earlier issues.

Organization of the Army Overseas

The basis of organization of the Army overseas is the division. The division is a self-contained formation of all arms with supporting services. It can operate as a single entity or it can be broken into independent brigade groups. The backbone of the division is the infantry. Some have imagined that infantry is an obsolete arm. The Department of National Defence, however, does not think so. The lessons of this war make it clear, says the Department, that we must have infantry and plenty of it. Supporting the infantry is a powerful divisional artillery with field guns, anti-tank guns, and anti-aircraft guns. This gives the division punch in the attack and protection in the defence.

The Divisional Engineers comprise three field companies and a Field Park Company in each division. The field companies assist in the construction of roads and bridges and field defences and are ready to demolish any of them in case of need. Indeed the engineers are ready to turn their hands to anything and they can fight as well if they must. The Field Park Company holds and issues engineer equipment to the division as required. The engineers do not depend on their unaided hands. They are equipped with powerful machine tools of various sorts.

The Divisional Signals unit handles all the inter-communications down to the headquarters of units. It uses a great deal of wireless equipment, and it is able to lay and maintain lines for telegraphy and telephony. Its ranks are filled with skilled tradesmen and specialists—operators, electricians, fitters, mechanics, drivers, and so on.

It will be realized that a division consumes a great deal of supplies. For this work, there is the Army Service Corps, three units in all in every division—one for supplies,

one for gasoline, oil and grease, and one for ammunition. They are ready and equipped to maintain the flow of all these commodities to all the scattered units of the division under every condition of weather, ground, and movement,

Every unit has a medical officer and the division has three field ambulance units. Each field ambulance is able to form two advanced dressing stations and one main dressing station for the care of the wounded and sick. Not only does the medical service care for the wounded—it works ceaselessly to prevent disease, the scourge of armies in every age.

The ordnance repair services with its "Light Aid Detachments" and workshops are, in essence, well equipped garages which can repair anything from a Ford sedan to a 30-ton tank or a field gun. The ranks of these units are being filled with skilled artificers and tradesmen—fitters, welders, blacksmiths and many others.

In this connection it is interesting to note that the Minister of National Defence said on November 4th, "I do not know of any more important task in the modern army than the maintenance of vehicles." On November 27th the Department of National Defence announced that the First Canadian Base Ordnance Workshop has been formed and will leave for England as soon as it reaches its full strength. The new unit, which will be equipped completely with the best and most modern of tools, has been described as "the world's largest garage and repair shop".

Mechanization of the Canadian Army has been reduced to statistics by Victor Sifton, Master-General of the Ordnance. In a radio speech on October 5th, 1941, Mr. Sifton said that "the scientific employment of machines . . . is the goal at which we are aiming." A tabulation of Mr. Sifton's statistics appears on page 17 of the November issue of "Canada at War."

In every division there is a Postal unit, a Provost Company, a Field Hygiene Section, Dental detachments, a Salvage unit, a Mobile Bath, and other services to care for the needs of 17,000 men.

Behind are a host of corps and army troops numbering at least half the strength of the divisions themselves. These Corps troops are units which are of such a nature that it is more economical and efficient to centralize them

directly under Corps control. They are of many kinds. Field, medium, light anti-aircraft and medium machine gun battalions augment the striking and defensive power of the divisions. Engineer battalions, road construction companies, tunnelling companies swell the ranks of the engineers. Troop-carrying companies provide transport for the infantry soldier, increasing his mobility and range of operations from 15 to 100 or 150 miles per day. More supply services, more ordnance repair facilities and more medical units all add to the numbers.

Finally, there is the powerful Army Tank Brigade with its "Churchill Tanks". It will form the van of the Canadian attack when the Corps goes into action.

Behind the Corps is an organization of Base Units—holding units with a quota of reinforcements for every unit and arm in the Corps; a large training school with several wings, including a wing where soldiers qualify for commissioned rank; general hospitals, workshops, pay offices, printing and stationery offices, and many other services.

The Army in Canada

Units of the Active Army at present in Canada guard the Dominion's coasts and vital areas. Most of these men are volunteers who are prepared to go anywhere required. The Fourth and Sixth Divisions at present at home are, or will be, the counterparts of those abroad.

While the arming of Canadian forces overseas and the sending of supplies to the battle fronts of the world have been the first consideration of Canada's war industry, the Canadian Army at home is steadily being fully equipped. Hon. C. D. Howe, Minister of Munitions and Supply, said on September 11th, 1941, "The problem of equipment for our Canadian armed forces is one that no longer gives concern. . . We are now producing practically everything required by a fully equipped infantry division at a rate that enables us to equip a new division every six weeks." These words obtain added significance when taken in conjunction with a statement made late in September by Maj.-Gen. H. D. G. Crerar, then Chief of the General Staff.* Maj.-Gen. Crerar said that the object of army training in Canada is to produce formations "capable of fighting from the day they land overseas."

*Maj.-Gen. Crerar was recently appointed to command the Second Division overseas. The new Chief of the General Staff is Maj.-Gen. K. Stuart, formerly Vice-Chief of Staff.

For the purpose of administration and command, Canada is divided into eleven Military Districts, and on the Dominion's east and west coasts are two Commands known as the Atlantic and Pacific Commands respectively under General Officers Commanding-in-Chief, who are charged with all matters concerning the defence of their coastal areas. To the eleven Military Districts are delegated the responsibilities for administering the troops within those areas, the raising of new units required from time to time, and the training of units and reinforcements.

Coastal defences are provided by a large number of fortresses and defended ports, and by field formations (divisions and brigades) strategically located in the eastern and western areas and in other parts of the country. Coastal defences include not only coastal artillery but also anti-aircraft artillery, searchlight batteries, signal, engineer, and maintenance units, as well as a considerable number of infantry battalions, which keep watch on Canada's extended shores.

Conscription For Home Defence

Some of the soldiers now on guard or in training in Canada are men who have been conscripted for home defence under the National Resources Mobilization Act. They will serve for the duration of the war.

Canada conscripts men, aged 21 to 24, who have not already joined one of the forces, for full-time home defence duties with the Active Army. During their four months' period of preliminary training, these men are given an opportunity to volunteer for active service wherever required with the Navy, Army or Air Force. Those who do not volunteer for such service are posted to home defence duties.

Compulsory military training was announced in Canada in June, 1940. In that month the National Resources Mobilization Act was passed. It gave the Canadian Government power to require "persons to place themselves, their services and their property" at the disposal of the country whenever this "may be deemed necessary or expedient for securing the public safety, the defence of Canada, the maintenance of public order, or the efficient prosecution of the war". This power, however, "may not be exercised for the purpose of requiring persons to serve in the military, naval or air forces outside of Canada or the territorial waters thereof".

The first group to be given thirty days' basic training under the authority of this act, went to camp in October, 1940. In the succeeding months about 87,000 men were so trained. About 20,000 of these joined the active forces; the rest were posted to the Reserve Army for part-time training. In February, 1941, the period of preliminary training was increased to four months, in March, the first four-months class went to camp; and shortly afterward it was announced that men who had been conscripted would be kept in the Army.

All men aged 19 to 45, who were single, widowers or divorced at the time of National Registration, are by law liable for military service in Canada. At present the Dominion is calling up the 21-24 age group. Provision is made for postponements in a few very special cases where it is in the public interest that they should be granted. Men not selected at their first call are still liable for service and may be called at any time. Monthly classes totalling nearly 30,000 have been selected. About a third of these men have volunteered for service anywhere with the Navy, Army or Air Force.

The Canadian Reserve Army

The Canadian Reserve Army constitutes a pool of partially trained men from which volunteer reinforcements for the Active Army may be drawn. It is also to perform "an operational role in defence of Canada when required" and give "aid to the civil power in case of subversive or other disturbances." It numbers more than 145,000 men; of these a certain number are men who have been given thirty days' compulsory military training and then posted to reserve units for part-time training. They are now steadily being called for full-time home defence duties, unless they volunteer for overseas service. The remainder of the Reserve Army are volunteers. Members of the Reserve Army train for a specified number of hours each week, and at camp in the summer, and at the same time carry on with their civilian jobs. Because of the nature of the work which the Reserve Army is designed to perform, the age limit is now 50, compared with 45 for the Active Army.

Training and Reinforcement

The system of training reinforcements is founded on a great chain of training centres across Canada. These are of two types—basic and advanced. At the Basic Training Centre the recruit is taught the fundamentals of the military art. He learns to be a soldier. From the Basic centre he goes to an Advanced Training Centre and there he learns the work of his own arm—Artillery, Engineers, Signals, or whatever it may be. And when this training is complete he graduates to a holding company and in due course he goes overseas to a Holding Unit, where he stays continuing to train, until his arm or unit needs him.

Capacity for training army tradesmen in Canada has been almost trebled. Army trade training centres are turning out maintenance men at the rate of nearly 25,000 a year, and industry trains about 1,200 a year. One army trade training centre—the (Advanced) Army trade school at Hamilton, to which specially picked maintenance men are sent on completing their vocational or industrial courses—has an annual output of about 6,000. The (Advanced) Mechanics' Training Centre at London turns out about 2,400 a year. These capacities are in addition to the output of the vocational and industrial centres.

From the advanced centres men go to the advanced training centres of their different arms and learn to apply their trade in practice. Canada's total capacity to train army tradesmen is approaching 40,000 a year.

This complex organization spreading net-like from coast to coast has been developed in the past two years from what in the beginning were almost negligible military resources. Some idea of the nature and extent of the training now being given Canadian soldiers in the Dominion may be gained from the following table:

Officers' Training Centres.....	2
Basic Training Centres.....	29
Advanced Training Centres (infantry, machine gun, small arms, artillery, engineers, signals, armoured car and tank, army service corps, medical, etc.) . . .	28
Technical Training Centres, (including technical schools, etc., co-operating).....	125

The Air Force

"They (Canadian airmen) are the finest material the Dominion breeds. Their record of success has been outstanding, and they have accounted for many of the Germans who have been shot down."

Sir Philip Joubert, broadcasting in "Britain Speaks" on November 27th, 1940.

For air crew the Air Force wants men between the ages of 18 and 25. The age limit for pilots is 30; for observers and air gunners, 32. But it is the 18-to-25 class in which the Air Force is particularly interested. Thousands of these have already enlisted in the Air Force, along with large numbers of like-minded young men from the United States, and the flow of applicants continues to be heavy. The total number of "approaches" to R.C.A.F. recruiting centres since the beginning of the war is 317,000. This includes, in some cases, more than one "approach" by one man. The total number of medical examinations is 153,000; the total number of trade tests, 97,000. These figures give an idea of the interest which young Canadians are taking in the Air Force. Hon. C. G. Power, Air Minister, has said that "Canadian youth have simply rushed to our recruiting offices." On November 6th he told the House of Commons "It has been possible, and without any very great propaganda on our part, to enlist a certain number of American applicants." He went on to declare, "In so far as the Air Force is concerned the sky is the limit. We will take as aircrew all the young men of Canada who are willing and able to serve, and we make no limit anywhere."

The Air Force to-day, including all branches, is more than twenty times as large as before the war. This is indicated by the following figures:

Pre-War Strength
4,000

Strength To-Day
More than 93,000

The Air Force Overseas

A vast majority of the Canadian airmen overseas are attached to Royal Air Force squadrons and they have fought wherever the Royal Air Force fights—over Britain, Europe, the Mediterranean area, Russia. An R.C.A.F. officer who returned from Britain recently has stated that there is hardly an R.A.F. squadron that does not contain

Canadians. In addition, at least seventeen R.C.A.F. squadrons are in action overseas and this number is expected to be 25 by the end of this year. At the same time, it is expected, the number of trained Canadian airmen overseas will be equal to a division of infantry. Soon all Canadian squadrons overseas will be serviced by Canadian ground crews, and thousands of Canadian radio technicians are assisting in ground defence work. Air Minister Power has said that eventually the R.C.A.F. may constitute one third or even one half of all Empire airmen.

Canadian airmen have been engaged in combat since the outbreak of war. Many had joined the R.A.F. before war broke out, and others followed in late 1939 and early 1940. The first R.C.A.F. squadron arrived in Britain early in 1940; it was followed shortly afterward by two other squadrons. The flow of Canadian airmen from the British Commonwealth Air Training Plan in late 1940 and in 1941 has steadily increased the number of R.C.A.F. fliers at the battle front. In the past few months large numbers of Canadians have been reaching Britain with Air Training Plan contingents.

Early Work

In the early part of the war the work of Canadian airmen was confined largely to that of individuals in the R.A.F., and little official information concerning their activity is at present available. The following facts about Canadian squadrons, however, are known. The "All-Canadian" squadron of the R.A.F., formed late in 1939 of Canadian and British pilots, has had a very distinguished record. It destroyed at least thirty planes over France and the Low Countries during the Battle of France in the summer of 1940 and had the honour of being the last squadron to leave French soil. It fought over Dunkirk, and played its part in protecting the evacuation of British and Allied troops. It also fought over London during the September "blitz". In six fights it destroyed fifty-five enemy planes with a loss of only two of its own pilots. By January, 1941, it had accounted for more than 100 enemy planes. All but one of the Canadians in the squadron have now been transferred, and its famous leader, the "legless" Squadron-Leader Douglas Bader, is reported a prisoner of war.

One of the first R.C.A.F. fighter squadrons to see action has had an equally distinguished record. It shot down 12 enemy planes in its first 19 days of action and is credited with at least 100 planes. It took part in the air battles over London in September, 1940, and on one day shot down 14 enemy planes.

Current Activities

In recent months, with Canadian squadrons being formed in increasing numbers, R.C.A.F. activity overseas has become frequent front-page news. Canadian squadrons are now assigned to fighter, bomber, coastal patrol, army reconnaissance and night fighting duties. One Canadian squadron has established a reputation in operating the new "Hurricane bombers". The first "torpedo-bomber" squadron of the R.C.A.F. has recently been formed.

The following résumés of despatches give some idea of the sort of activity in which Canadian squadrons have been engaged in recent weeks.

Bombing Nazi Shipping

"The Scourge of Nazi Shipping" is the designation given by the British press to a Royal Canadian Air Force general reconnaissance operational squadron. The Squadron has certainly earned the high reputation it enjoys, for on nearly every night its great Hudson machines are sweeping enemy seas, or bombing and machine gunning German convoys as they seek to slip along German, Dutch and Danish coasts under cover of darkness.

In command of the Squadron is a Wing Commander of the Royal Air Force. He made the first strike of the squadron. A day or two after the Squadron was formed he located an enemy convoy of approximately twelve merchant vessels of 1,000 to 1,500 tons and attacked them from a height of fifty feet. One or more direct hits were made.

A Canadian sergeant pilot made the second strike. "We found a convoy of thirty enemy merchant ships off Terschelling, one of the islands of the Friesian group off the coast of Belgium," he states. "We attacked the largest of the ships and the rear gunner saw two explosions indicating two direct hits. Having no more bombs we went down and machine gunned another vessel."

On the same night a sergeant pilot, a pilot officer and an air gunner, all hailing from western Canada, began the first of their many offensives. They attacked a 2,000-ton German merchant vessel and a large burst indicated a direct hit. A few days later they attacked the leading vessel of eight ships. The results of this action were not observed but the Air Gunner said he saw a red glow as they flew off which probably indicated a hit.

The Sergeant Pilot relates, "My first taste of real action took place under ideal conditions. It was good and dark with patches of cloud and we spotted a nice convoy. We flew in at about 100 feet to drop our bombs and got a direct hit. We could not stop to see whether the ship sank. Our next crack—well, we couldn't see what we had done unless we had gone back which, with all the flak* about, wasn't worth the trouble. Our third attack, too, gave us no results so far as we could see, but I am pretty certain we smashed something up."

Two other Pilot Officers have also secured hits on merchant vessels. One night they nearly added a Junkers-88 to their bag. They sighted it three quarters of a mile away and gave chase. They opened fire and the enemy machine took to clouds with black smoke issuing from one of its engines. Their best night was when they went in to attack three merchant vessels, of from two to three thousand tons, at a height of only thirty feet despite intense accurate fire from escorting "flak" ships. One direct hit was made and a large column of smoke was observed.

Two Sergeant Pilots also have a direct hit to their credit. They attacked a 3,000-ton vessel in an enemy convoy off Ameland. No burst was observed but a hit was presumed since the enemy vessel was lit by a dull red glow for fifteen minutes after the attack. They arrived back with one of the windows of their machine completely blown out, telling of the "flak" which had been thrown up at them.

A Flight Lieutenant also claims a direct hit. He attacked a 10,000-ton vessel in convoy and secured a direct hit between the funnel and the bridge, starting a large fire. "We had had two hours of stoodging around," he explains. "It was a cloudy night but flying low we came across twelve merchant vessels escorted by four flak ships.

*Anti-aircraft fire.

We attacked at once and dropped our bombs—or thought we had. We were miles away when we discovered only one had left the racks, so we turned back and dropped the other three. One hit a vessel exactly amidships. It was a 10,000-tonner boat. Then we did a bit of machine gunning just to make up for it."

"The fellows are getting on extremely well", says the English Wing Commander of his Canadians. "They don't mind how hard they work and the only complaint they make is when the weather is too bad to fly. We have so far made quite a record. It is a pity we can't tell how many ships we have sunk but we know, in any case, that we are doing a great deal of damage to Germany's sea communications and that is what the Squadron is for. Canada should be well pleased with her airmen."

A Fighter Combat Report

Here is a typical combat report of a Royal Canadian Air Force Fighter Squadron. "The Squadron left at 1405 hours as close escort to a formation of Blenheims. The French coast was crossed. No flak was seen. The bombs were seen to burst in the wood where heavy flak was experienced. Two minutes after leaving the target a 109F dived from starboard through the bombers without firing. Pilot Officer P—, on the port centre of bombers, followed this aircraft down giving a 10-second burst with ample deflection at 250 yards range. He saw pieces breaking off the aircraft's port wing from the root to the tip. The 109F then passed out of view to the rear and Pilot Officer P— resumed his position. (This 109F is claimed as damaged.)

"As the formation left the French coast, Sgt. McC— warned the 'Beehive' that three Me.109F's were coming in from dead astern; they were being chased by Spitfires. One of the aircraft peeled off to starboard and Sgt. McC— attacked, opening up from quarter astern to dead astern, with a 5 second burst from 150 yards. The 109F drew rapidly away and down to port, pouring out blackish smoke. Sgt. McC— again took up his position and saw this aircraft on its side close to the water and a few seconds later saw only a smudge in the water. This is confirmed by Flying Officer F—. (This 109F is claimed as destroyed).

"Later 4 Me.109F's came from starboard across the front of the bombers. F/Lt. C— fired at 300 yards from

three-quarter astern at the leading aircraft, a $2\frac{1}{2}$ second burst; F/Lt. M— and Sgt. M— fired a 2-second burst full beam attack, all without apparent effect except that the formation broke up and away.

"Halfway across the Channel a Me.109F and a 109E flew from starboard across the bombers in a shallow dive. F/Lt. M— gave the leader a 4-second burst and strikes were seen on the engine and fuselage; the enemy aircraft dived away and then climbed again. About the same time Sgt. R— saw a 109F diving on the last Blenheim to starboard of the bombers, which seemed to lag behind. The 109F was slightly below and astern of the Blenheim and Sgt. R— was abreast and to starboard of the aircraft. Sgt. R— then turned to attack the aircraft who immediately turned toward him. Sgt. R— gave him a 3-second burst as he passed at 50 yards range using 20° deflection. The enemy aircraft promptly turned away bringing Sgt. R— dead astern at 100 yards. Sgt. R— fired a 4-second burst as the enemy aircraft drew away to 150 yards. The 109F shuddered and gave out heavy black and white smoke and continued in a shallow dive turning to port. Sgt. O'N— reports seeing this enemy aircraft in a flat spin definitely out of control with black smoke pouring out. (This 109F is claimed as destroyed).

"Later F/Lt. M— saw a 109F on the tail of a fighter of another squadron. This 109F then pulled up to fire at the leading bomber and broke away to port as F/Lt. M— gave it a beam attack from above, the pilot having a plain view followed by dead astern, in all a 12-second burst from 20 yards ending at 250 yards. The enemy aircraft was last seen in a shallow dive going towards the English coast. (This 109F is claimed as destroyed).

"Sgt. B—saw an enemy aircraft climbing to attack rear bomber from astern; tracer from the bomber appeared to hit the enemy aircraft who then flew level 100 feet below the bombers. Sgt. B— got in a 2-second burst from half astern. The enemy aircraft climbed and opened fire at the leading bombers as Sgt. H— attacked it with a 3-second burst from 50 yards. Tracer was seen to hit along the fuselage and the enemy aircraft was last seen skidding to port with white smoke trailing behind. (This 109F is claimed as damaged)."

"Hurricane Bombing"

"Hurricane bombing" by a Canadian squadron was recently described in a radio broadcast from London by a Canadian Squadron-Leader. He said that Canadian airmen are flying new Hurricane fighters outfitted as bombers and dropping their bombs from a low level "with greater accuracy than can be achieved generally in dive-bombing."

Describing recent operations of the R.C.A.F. squadron which he commands, he said that "whoever thought of fitting bombs to Hurricanes is to be thanked for giving the squadron I command some of the most thrilling days' work that has ever fallen to the luck of fighter command pilots. . . In our Hurricane bombers we don't have to dive on our target. We come down almost to ground level before we reach them and drop the bombs in level flight." He said that the Hurricanes, travelling sometimes more than 300 miles an hour, usually are on top of their target before the anti-aircraft gunners see them and though the pilot would have little chance of bailing out if the plane were hit, "so far the advantage seems to be on our side and not on the ground defence."

He described a recent attack he and another member of the squadron made on a railway bridge. "We swept over it, barely skimming the structure, and let the bombs go", he said. "Another pair in the squadron coming behind saw the bombs explode in the river and the whole bridge slump on one side. As they passed over it they saw the bridge looking as crooked as an eel."

R.C.A.F. Communiqués

The following incidents which took place in the past few weeks, are noted in recent R.C.A.F. communiques.

In night-fighting operations over Britain an R.C.A.F. night fighter squadron destroyed three enemy raiders and damaged a fourth. The three aircraft destroyed—a Junkers 88, a Dornier 17 and a Heinkel 111—were all shot down by the Wing Commander, two of them within half an hour on one night. The Dornier blew up in the air when hit by cannon fire from the Wing Commander's guns, and pieces of it struck his own aircraft, putting one engine out of action.

Five of the day-fighter squadrons of the R.C.A.F. have been active over enemy territory in conjunction with Royal

Air Force squadrons. Flying Officer W— shot down a Messerschmitt 109 and “probably destroyed” another. One squadron, while on a dusk patrol over the North Sea, attacked and shot down a Junkers 88 bomber.

One of the night-fighter squadrons intercepted and engaged an enemy bomber believed to have been a Heinkel 111K. It was seen to be hit in the course of three bursts of aircraft cannon fire and when last seen was diving in damaged condition.

Squadrons attached to the Bomber Command were also active. One bomber squadron, besides taking part in recent heavy raids on Berlin, bombed targets at Hamburg, Nuremberg, Duisburg, Wilhelmshaven, Emden, Mannheim, Frankfurt, Dunkirk and Boulogne. From these operations all R.C.A.F. aircraft returned safely to their base.

In recent weeks a coastal command squadron attacked fifteen enemy vessels. One such ship was sunk within four minutes of the attack, and many other ships were left in a damaged condition following the air attacks, which were made from low levels. In all weathers, another squadron carried out escort patrols and safely convoyed British shipping through the area allotted to it. Gales of particular severity were experienced, including one “blow” which reached a velocity of 83 miles an hour, the worst gale on record in that area since 1901.

A squadron on army co-operation duties, one of the first squadrons of the R.C.A.F. to arrive in England, recently made its first operational sortie with new aircraft equipment. The sortie was carried out as an offensive reconnaissance over the coast of occupied France.

The total of dead and missing in the R.C.A.F. is now more than 1,000 in all theatres.

The Air Force in Canada

With enemy submarines operating off the Strait of Belle Isle and convoyed ships plying in and out of Canada’s east coast, the R.C.A.F. at home has an important task to perform. Ships must be protected and every foot of Canada’s coasts must be searched daily, not only close to shore but far out at sea. This task the R.C.A.F. vigilantly

performs not only on the Atlantic Coast but on the Pacific and in the North. Sometimes R.C.A.F. planes patrol so far out on the Atlantic that they could land more easily in Ireland than at their home base. Co-operation with the Navy is second nature to the coastal patrol squadrons. A striking example of this was the part which the R.C.A.F. played in the search for the "Bismarck".

During the past summer Canada has enlarged and strengthened her system of defensive and staging airdromes. The Dominion has established air bases in Labrador and elsewhere in the north. These are for defence, for ferrying and for emergency landings in case fog or weather conditions make any of the usual places unavailable. Several defensive airdromes have also been built in Newfoundland and on Canada's east and west coasts. Canadian squadrons on both coasts have been materially increased in numbers in recent months and they are provided with many types of modern aircraft.

Citations and Decorations

The following are among the citations and decorations which have been won by Canadian airmen:

Awarded to Canadians in the R.A.F.

Distinguished Service Order.....	1
Distinguished Flying Cross.....	71
Bar to Distinguished Flying Cross.....	6
Distinguished Flying Medal.....	6
George Medal.....	1
Air Force Cross.....	4

Awarded to Canadians in the R.C.A.F.

Order of the British Empire.....	2
Distinguished Flying Cross.....	9
Distinguished Flying Medal.....	5
Mentioned in Despatches.....	2

The British Commonwealth Air Training Plan

The British Commonwealth Air Training Plan has many of the elements of greatness. It is rich in facts that capture the imagination: It has about twice as many aircraft as last year and by the end of this year it will have in operation about 4,000 planes, a number almost equivalent to the total number of *men* in the R.C.A.F. at the outbreak of war. . . . The total number of planes which it will ultimately utilize for training purposes is 10,000. . . . In the first three years of its operation it will cost more than \$800,000,000, of which sum Canada will provide over \$500,000,000, considerably more than the Dominion Government collects in taxes in a normal peace-time year. . . . At some training schools one plane leaves the ground every three minutes. . . . At some training schools planes fly day and night. . . . All training schools operate all the year round in a country that is noted for its uncompromising winter. . . . More than 1,000,000 miles a day are flown on an average. . . . The first class comprised only a very small number of men; that class has been multiplied one-hundredfold. . . . The Plan is now turning out pilots, gunners and observers at twice the rate originally planned. . . . It operates 92 training schools of all kinds, utilizes 18 pre-enlistment trade training centres, has 131 establishments and 1,860 buildings of all kinds.

The Plan trains Canadian, Australian and New Zealand airmen, and there is a sprinkling of students from other parts of the Empire. It is thus essentially a Commonwealth enterprise. Canada, however, has undertaken to supply most of the men. Canadians recruited by the R.C.A.F. constitute 80% of the air crew trained or in training, and about 10% of these are American volunteers.

Construction of air force projects in Canada is still proceeding apace. "During the past summer", said Hon. C. G. Power, the Air Minister, on November 6th, "with the construction of schools, new construction at schools already in existence, new projects in the way of reserve fields, and new buildings for auxiliary services, such as manning depots, embarkation depots and so on, our works and buildings branch has been as busy this summer as it was in 1940. Probably the expenditure is just as great."

Mr. Power explained that this expansion has been partly caused by the transfer of R.A.F. schools to Canada. "Apart from the joint air training plan schools themselves", he said, "there are now operating in Canada other schools and establishments manned by the Royal Air Force personnel, and utilized primarily for the training of Royal Air Force pupils . . . Canadian government facilities have been used in connection with the selection of sites for those schools, the development of airdromes, and the construction of buildings and runways. All projects at present contemplated—and I say this advisedly—are being proceeded with expeditiously. The additional burdens placed upon the various departments, as well as the Royal Canadian Air Force, have been met without difficulty. The estimated cost of the transfer school policy to March 31, 1942, is \$105,000,000. That is only an estimate, and it is on a repayment basis."

Although no further schools for the Plan itself are at present contemplated, the training capacity will not remain static. This was explained by the Air Minister on November 6th. "All the flying stations in Canada are now selected," he said. "The Plan is now in full operation. As a matter of fact there remain two schools to open before the end of the year, but all sites are selected and construction well under way, and we do not propose to develop any more airdromes . . . When we 'up grade' or increase the pupil population we shall add more buildings to the existing establishments." Five elementary flying schools are to be made into double schools this month.

The Plan is sending men overseas in increasing numbers. The airmen who landed from the convoy which brought the Fifth Division to Britain recently constituted the largest draft trained under the Air Training Plan yet to arrive in Britain. The party included men from Canada, Australia, New Zealand, R.A.F. airmen and Norwegians trained in Canada. The contingent formed the complete complement of a big peacetime liner.

The quality of the airmen trained by the Plan has been appraised by the British Air Ministry in the following words, taken from the minutes of a business meeting attended by Canada's Air Minister when in Britain last summer:

"The air member for training paid a warm tribute to the high personal quality of Canadian trainees. He mentioned that there had been many factors which might have had an adverse effect on the quality of the output from the training scheme as it arrived in the United Kingdom.

"The scheme was one of great magnitude, involving much initial preparation. Some of the staffs available were necessarily inexperienced, essential equipment could not be supplied and after completion of basic training there were inevitably gaps during voyage and waiting periods. Furthermore, on account of the need for increased output the amount of training had been reduced to the bare minimum. He expressed his gratitude for the valuable assistance rendered by Canada in increasing the output during the difficult period through which we had been passing. There were factors such as acclimatization in the United Kingdom, map reading difficulties, different conditions of visibility and the "blackout" which might have been expected to make it necessary to give the B.C.A.T.P. pupils a lengthened course of training at operational training units. In spite of these factors, the quality of the training given in Canada and the keenness of the pupils had been such as to enable them to complete their operational training within the normal length of course."

Air Force ground crew trade schools have trained about 25,000 men. Eighteen pre-enlistment trade training centres are training youths in Air Force trades.

Preliminary instruction is being provided for young Canadians who intend to join the R.C.A.F. The Air Cadet League of Canada has enrolled 14,000 boys aged mostly from 13 to 17. Pre-flight training based on the R.C.A.F. syllabus is being given as an alternative to army training by a number of Canadian universities.

Note:—For a table showing the schedule of air crew trainees and the types of flying school in operation, see page 24 of November issue of "Canada at War." For a brief description of the work of the Air Cadet League, see page 26 of November issue of "Canada at War".

Casualties

The following are among the casualties which had been reported in the Canadian armed forces up to November 26th 1941:

Navy

Killed on Active Service.....	362
Other deaths.....	46
Total Dead and Missing.....	408

Army

Overseas

Killed by enemy action.....	46
Died (all causes).....	389
Missing believed drowned.....	1

In Canada

Deaths (All Causes).....	457
Total Dead and Missing.....	893

Air Force

Killed.....	574
Died.....	84
Missing.....	368
Drowned.....	8
Total Dead and Missing.....	1,034
Prisoners of War.....	92
TOTAL (ALL FORCES) DEAD AND MISSING	2,335

Women's Auxiliary Services

Note:—A brief note on the organization of Women's Auxiliary Services is on page 26 of the November issue of "Canada at War." A fuller treatment of this subject will be contained in the next issue.

CANADA: ARSENAL AND STOREHOUSE

Sending Supplies to the Battlefronts

"Munitions from Canada are now reaching every theatre of war in quantities that are impressive to those receiving them. We have established a reputation for quality and prompt delivery."

Hon. C. D. Howe, Minister of Munitions and Supply

In 1938 Canada ranked fourth among the exporting nations of the world, being exceeded only by the United States, Britain and Germany. This year the Dominion is exporting more goods than ever before in her history—about 80% more in the first ten months of this year than in the corresponding period of 1939. Canada, always a storehouse of raw materials and food, is rapidly becoming an arsenal as well, from which supplies are going to many parts of the world. Some idea of the extent to which Canada is becoming a source of supply for the democratic nations may be gained from the following figures. They show that Canada's exports to friendly countries have grown since the outbreak of war, and they illustrate the role Canadian equipment and supplies are playing in the East and that there has been a substantial movement of aid to Russia and China.

<i>Destination</i>	<i>Exports in First Ten months of 1939</i>	<i>Exports in First Ten months of 1941</i>
United Kingdom.....	\$268,759,000	\$548,985,000
Rest of Empire.....	84,010,000	177,438,000
United States.....	281,195,000	477,593,000
Russia.....	2,000	1,285,000
China.....	2,441,000	6,126,000
Egypt.....	277,000	55,639,000
India and Burma.....	4,029,000	34,023,000
Straits Settlements.....	2,158,000	7,973,000
Newfoundland.....	6,660,000	22,243,000
Germany.....	7,869,000
Italy.....	2,097,000
Japan.....	24,124,000	1,501,000
All Countries.....	726,741,000	1,308,096,000

Sending Supplies to Britain

In the early part of the war Britain paid Canada with gold for part of the goods shipped from the Dominion. This gold amounted to less than one quarter of the money Britain has so far needed to pay Canadian producers and it has cost Canada in the United States considerably more gold than this to enable her to fill her British orders. Since December of last year there have been no gold shipments from Britain to Canada, and Canadians now supply Britain with all the Canadian dollars she needs to pay Canadian producers.

Britain pays for a fraction of her purchases in Canada by exporting goods to the Dominion. Most of her Canadian supplies, however, must be financed otherwise. The Dominion has provided Britain with about one third of the Canadian money she has needed by repatriating Canadian securities held in Britain; this amounts to paying debts before they fall due. The remaining two thirds Canada has supplied by accumulating Sterling balances—in effect, lending Britain money. All this credit, like the money raised to spend on Canada's own war effort, must be provided now by the Canadian people.

In short, Canada "lend-leases" supplies to Britain. The Canadian people advanced more than \$900,000,000 for this purpose in the first two years of the war and an equal amount is being provided for the same purpose in the present fiscal year (April 1, 1941, to March 31, 1942).

In the first two years of war Canada sent goods to Britain which were worth more than \$1,000,000,000. They included substantial quantities of such war equipment as machine guns, anti-tank guns, anti-aircraft gun barrels, shells, small arms ammunition, explosives and chemicals, airplanes, corvettes, minesweepers, small boats, mechanized transport, and universal carriers; hundreds of thousands of tons of non-ferrous metals; enormous quantities of timber to make up for most of Britain's imports of European timber, which amounted to about 75% of her total normal supply; large quantities of pulp and pulp products; and the following foods:

Wheat.....	More than 300,000,000 bushels
Flour.....	7,000,000 barrels
Bacon and other pork products.....	800,000,000 pounds
Cheese.....	195,000,000 pounds
Eggs.....	15,000,000 dozen
Honey.....	13,000,000 pounds
Total (excluding wheat and flour and including canned goods such as concentrated milk and tomatoes and other foodstuffs).....	1,830,000,000 pounds

Part of this food is really contributed by the Canadian people. Canadian governments pay about one third of the return to the producer on all cheese sold to Britain and similar steps have been taken with respect to bacon and other pork products. Also, the amount of such products available for domestic consumption has been reduced by about 25%; and such products are no longer to be exported to any country except Britain or British possessions.

During the present year, the following foodstuffs will be shipped to the United Kingdom in quantities limited only by the British demand and Canadian production: bacon and other pork products, cheese, evaporated milk, apples (fresh, dried and canned) canned tomatoes, honey, dried beans, fruits for jam, onions, dried vegetables, canned salmon, canned herring, cereal breakfast foods, wheat and flour.

In order to supply Britain with eggs, Canada has had to increase prices to her producers and also to the Canadian consumer. In the case of canned salmon, two-thirds of the entire Canadian pack has been reserved for British consumption. Practically no supplies of canned herring will be available to the Canadian public, since quantities larger than the normal pack are being reserved for Britain. The effort to meet British requirements as far as possible will result in higher prices for green vegetables and tomatoes and shorter supplies of those products for Canadian consumption. The general policy is that the Canadian people will go short where necessary in order to keep the British supplied, the rest being a matter of technique.

On November 20th, 1941, Hon. J. G. Gardiner, the Minister of Agriculture, said "Sir John Orr said the other day . . . that the British government is spending £100,000,000 to make it possible for British people who cannot afford to pay high prices for food to get food.

The Canadian government will spend \$100,000,000 this year to assist in making food cheap to British consumers. That is more per capita than Sir John's figure for Britain. Every year since the war started Canadian farmers have accepted prices for their food commodities which are so far below what they are entitled to that the act constitutes a gift to British consumers of food from one branch of our population much greater than an additional \$100,000,000."

Mr. Gardiner also stated that in the past season, to assist in livestock production, Canadian farmers have changed more than 6,000,000 acres of land from wheat growing. "Canadian farmers," said Mr. Gardiner, "have made greater changes in use of acreage in the two years of war than any other country in the world for which I have been able to get the records."

Inspected hog slaughterings in 1940-41 were nearly twice as high as in 1938-39, and in 1941-42 they are expected to reach 7,000,000 hogs. The average number exported to Britain for five years before the war was 25,000 weekly, and in the third year of the war it is estimated the rate will be 100,000 weekly. Mr. Gardiner predicted that with good prices and favourable weather next year, Canadian cheese producers will almost overtake their year of highest production in thirty years. "If they do," he said, "it will mean that they will have doubled their production in six years, with the greater part of the increase since the war began."

In the present fiscal year (ending March 31, 1942), Canada's exports to Britain will amount to about \$1,500,000,000—about four times as much as in the year 1939.

Canada's Raw Material and Food Resources

Note:—For a description of Canada's raw material and food resources useful in war, see pages 29-31 of November issue of "Canada at War."

Manufacturing War Equipment

"Canada is an arsenal of war munitions. We are manufacturing practically every weapon used in this war."

Hon. C. D. Howe, Minister of Munitions and Supply.

Two years ago Canadian industry was organized almost entirely for peace; to-day under the supervision of the Department of Munitions and Supply, a very large part of it is organized for war. The Dominion almost literally has built a war industry from the ground up. Practically every Canadian factory that can produce for war is now doing so wholly or in part, and this diversion is being continued where possible through the work of the Industry and Sub-contract Branch of the Department of Munitions and Supply. Millions of dollars have been spent by industry on plant expansion and equipment necessary for war production, and the Canadian and British Governments have authorized expenditures of about \$580,000,000 for the same purposes. Scores of entirely new factories, some of which are as large as any of their kind in the British Empire, have been erected, and hundreds more have been expanded and re-equipped. The bulk of this latter expenditure has been designed to increase the production of shells, guns and mountings, tanks, aircraft, chemicals and explosives and raw materials.

In the first year of the war the provision of plant structures and machinery constituted a serious problem towards a solution of which all concerned made a concentrated effort. Now that most of these difficulties have been overcome, Canadian industry has struck its stride and its record in war production has been impressive. Canada has now produced almost every type of war equipment which its munitions program calls for, and very substantial quantities of certain items have been turned out. The Dominion's war industry is now reaching the point of capacity production and is beginning to turn out a remarkably varied array of war equipment at high speed. A British management and labour delegation, which recently made a tour of the United States and Canada, made the following statement in an official press release issued at the conclusion of their trip, "While on the North American continent, we have been privileged to inspect over 80 different plants. During our stay in Canada, we

have been able to see the production of naval and mercantile ships, aircraft, guns, machine guns, shells, machine tools and other war-time equipment of vital importance, being produced on a scale that not only surprised and heartened us, but which, we believe, will similarly surprise and hearten the people of the Dominion itself."

Most of the war equipment now being produced in Canada has never before been manufactured in the Dominion. Referring to this development on September 18th, 1941, Finance Minister Ilsley said, "It is not too much to say that what has happened in the past year is nothing short of an industrial revolution. This has been accomplished in spite of all the difficulties in obtaining or preparing plans and specifications or in getting new machine tools, despite the need to learn or develop new skills, despite the scarcity of many materials and the inevitable dislocations of wartime."

The following paragraphs indicate the type of war equipment Canada is now manufacturing, with production figures, where it is permitted to give them, **as of November 4th, 1941:**

Ships

Shipbuilding has increased tremendously in Canada. At the beginning of the war there were only 1,500 workers in Canadian shipyards. Now more than 20,000 workers are employed in 17 major and 58 smaller yards. To-day the shipbuilding programme involves an expenditure of more than \$500,000,000.

A large number of naval ships have been built in Canada. Corvettes, minesweepers, patrol boats and motor torpedo boats are among the fighting craft which the Dominion's shipyards have already turned out in very substantial quantities. In recent months an average of one corvette every few days has been turned out. "Auxiliary cruisers" and a considerable number of yachts and motor boats have been converted to naval use. An even larger number of such craft have been chartered. Destroyers are to be built in Canada and other naval craft continue to be turned out with all possible speed.

The merchant-ship-building programme is now assuming very substantial proportions. It involves an outlay of \$300,000,000 and the building of cargo boats in Canada on a

scale never before contemplated in the Dominion. Several have already been launched and the keels of many more have been laid down. About 95% of the material used in each ship is produced in Canada. Due to recent war expansion of engineering plants, it is no longer necessary to import such accessories as engines, propellers and fittings. Some 500 industries located across Canada from coast to coast are engaged in manufacturing components for cargo vessels.

Deliveries are being made regularly under the \$9,000,000 small-boat programme. Many hundreds of boats, ranging from large motor vessels to small assault boats, have been ordered and the programme is more than 65% complete. These boats are being built for the Navy, the Army and the Air Force.

Ship repair, a very important aspect of the war programme, is receiving constant attention. Additional dry-docking facilities are being constructed on the Atlantic coast and additional handling facilities are being arranged at several ports. Projects under way include a semi-tidal dock, floating docks, repair piers, machine shops, boiler shops and marine railways.

Guns

Guns.....	—10 types of complete heavy guns with all mountings and parts being produced
Anti-aircraft Guns.....	—some already delivered
Field Guns.....	—in 1942 over 400 a month
Naval Guns.....	—some already delivered —in 1942 over 500 a month —being turned out
Tank Guns.....	—in 1942 over 150 a month
Extra Barrels.....	—some already delivered —thousands delivered (AA) —in 1942 over 1,000 a month (several types)
Bren Guns.....	—12,000 produced —2,000 a month now
Extra Barrels.....	—14,000 produced (Bren gun)
Browning Aircraft Machine Guns..	—some produced —thousands a month early in 1942
Vickers Machine Guns.....	—to be produced
Boys Anti-tank Rifles.....	—thousands a month early in 1942
Sten Sub-machine Guns.....	—thousands a month early in 1942
Naval Machine Guns and Mountings	—to be produced
Lee-Enfield .303 rifles.....	—thousands a month now, to reach 200,000 a year

Trench Mortars.....	—Hundreds delivered, increasing to 400 a month
Bomb Throwers.....	—to be produced in 1942
Smoke Projectors.....	—to be produced in 1942

On November 4th the Minister of Munitions and Supply said of Canada's gun programme; "Guns and equipments, after long months of planning, building and tooling, are now in very substantial production. This is a wholly new Canadian industry, and has required heavy capital expenditure for plant and for training of skilled personnel. The early period of low production is now moving into the crescendo of mass production."

Canada possesses one of the largest factories in the world manufacturing artillery from scrap to complete gun, and one of the largest automatic gun plants in the world.

Plans have recently been laid to increase by 600% the monthly output of 3.7-inch anti-aircraft guns. A capital expenditure of \$9,000,000 has been authorized to extend existing production facilities for mobile mountings for this type of ordnance and construction of a new plant will be started immediately. The new project will be one of the largest ever undertaken in Canada for ordnance manufacture.

Canada will shortly co-operate with Britain in the production of the barrel for another powerful type of anti-aircraft gun used in England. Large contracts for barrel forgings and machining have been placed with two Canadian factories. The two new types will supplement the present production of the famous mobile Bofors 40 mm.

Ammunition

The following list summarizes Canada's ammunition programme:

Heavy Ammunition

Heavy shells (twenty sizes)	— 9,000,000 delivered —capacity 1,200,000 a month now
Cartridge cases (ten sizes)	—10,000,000 delivered —capacity 2,000,000 a month now
Fuses (all types)	— 7,000,000 produced —capacity 1,000,000 a month now
Primers	— 8,000,000 produced —capacity 1,300,000 a month
Gaines, tubes and miscellaneous shell parts	—many millions produced —capacity about 1,000,000 a month now
Complete rounds (filled)	—some already shipped —1,000,000 a month in 1942
Filled cartridges	— 700,000 a month in 1942
Filled projectiles	— 700,000 a month in 1942

Small Arms Ammunition

Small arms ammunition	—hundreds of millions of rounds delivered —capacity 50,000,000 a month now —capacity 150,000,000 a month in 1942 —capacities include—ball, tracer, incendiary and armour piercing types of .303, .30/06, .22 long and .38 —new capacities will include .50, .55, .45, 9M and 20MM.
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Miscellaneous

Bombs	—500,000 delivered —types from 500-pound bombs to practice bombs
Mortar bombs	
Grenades	capacity
Anti-tank mines	} —in production: tens of thousands a month

Explosives, Chemicals, etc.

The following list summarizes Canada's explosives and chemicals programme:

Explosives (high explosives, rifle and cannon propellants, TNT, etc.) . . .	150,000,000 pounds delivered
Chemicals (intermediary chemicals and raw materials)	
Pyrotechnics (signal cartridges, flame floats, flares, smoke, generators, sea markers, signal rockets, lights, igniters, etc.)	70,000,000 pounds a month in 1942
	—hundreds of thousands delivered

Because of the heavy demand for chemicals and explosives from North America, production facilities of Canada's chemicals and explosives plants are being enlarged beyond the capacity originally planned. Very substantial quantities have already been shipped to Britain, and certain urgently required chemicals have been supplied to the United States and to some Dominions. The Minister of Munitions and Supply stated on October 7th, "British authorities have expressed gratification at the quantity and quality of ammunition produced in the Dominion."

Canada's chemicals and explosives programme embraces 23 plants of varying sizes. This year alone the total production of explosives in Canada will exceed the entire Canadian output during the whole of the first Great War.

Aircraft

The fifteen types of aircraft which have been in production at one time or another in Canada since the outbreak of war are:—

Elementary Trainers

Fleet 16B
Tiger Moth
Menasco Moth

Advanced Trainers

Fleet 60
Harvard
Anson

Service Aircraft

Shark
Delta
Grumman
Lysander
Norseman
Stranraer
Hurricane
Bolingbroke
Hampden

Canada's aircraft programme is now rounding into final shape with a long-range schedule based on seven modern types of aircraft. This is indicated by the following table:—

<i>Type of Plane</i>	<i>Name of Plane</i>
Elementary Trainer.....	Fairchild "Freshman"
Single-Engined Advanced Trainer.....	North American "Harvard"
Twin-Engined Advanced Trainer . . .	Canadian "Anson"
Twin-Engined Reconnaissance Bomber and Bombing and Gunnery Trainer.....	Bristol "Bolingbroke"
Coastal Reconnaissance Amphibian.....	PBY 5 "Catalina"
Twin Engined Fighter.....	Not released
Four-Engined Long-Range Bomber.....	"Lancaster"

On November 4th, 1941, the Minister of Munitions and Supply told the House of Commons, "Our aircraft industry has manufactured in Canada and placed in service since the outbreak of war, or has assembled in Canada, 3,749 aircraft. In addition, we have received from the United States in the same period 1,268 aircraft. The present average rate of production is approximately forty per week for all types, and in this regard it should be pointed out that the present production includes a heavier proportion of advanced trainers and service aircraft than in the earlier months of production. Link trainers are also being produced in Canada, with deliveries now well past the 100 mark.

"We are now in position to manufacture aircraft to meet all the requirements of the air training plan, as well as the aircraft requirements of the British training schools that have been located in Canada. We are in very substantial production of Hurricane fighters and Bolingbroke bombers for operational work, we are well advanced toward production of the Consolidated P.B.Y. boat, and we have recently undertaken production of the newest type of British 4-engine bomber, as well as a new type of British fighter plane."

The total number of training planes on order in Canada is 5,046. The total number of planes of service type on order in Canada—some of which may be used in Canada for defence purposes, but most of which will be made available to Great Britain and her Allies in various theatres

of war, are 3,144. Thus, the total number of planes on order with the Canadian aircraft industry today is 8,190.

The Canadian aircraft industry was of small dimensions at the beginning of the war, but since that time it has greatly expanded. This is indicated by the following table:—

	<i>Pre-War.</i>	<i>To-Day</i>
Floor-space occupied by Canadian aircraft industry.....	505,000 sq. ft.	3,500,000 sq. ft.
Personnel employed.....	1,000	34,000
Production.....	—	As much in a week as was produced before the war in a year

The overhaul and repair division of the Aircraft Production Branch now supervises 29 plants scattered from Halifax to Vancouver, where it services about 5,000 planes a year. These facilities will need to be doubled within the next twelve months.

Vehicles and Tanks

The following figures summarize Canada's army vehicles and tank programmes:

Army vehicles of all types.....	—175,000 delivered*
Tanks.....	—a large number produced
	—200 a month early in 1942
Universal carriers.....	—1,500 delivered*
	—400 a month now
Armoured scout cars and reconnaissance cars..	—hundreds a month early in 1942

On the average, Canada produces one army automotive unit every three minutes. These include trucks and tractors of every type required by the armed services. Practically all of the 160 different types of motor vehicle being used by the Canadian Army are being manufactured in Canada. Canadian army vehicles have been used in every engagement in which the Empire's soldiers have participated. They are being used against the Germans in Libya to-day.

Among the important products of the motor industry is the universal carrier, in essence a baby tank. These efficient little machines travel at speeds up to 45 miles an hour on caterpillar tracks, manoeuvre with ease on almost any terrain, and are equipped with machine guns.

*Late November

A single Canadian plant turns out enough of these carriers in a day to equip a battalion, enough in 14 days to equip an infantry division. Other special motorized equipment being made in Canada includes ambulances, wireless trucks and field workshops.

It is expected that 100 Canadian tanks will reach Russia before the end of this year.

Miscellaneous

The following are among the miscellaneous war supplies being turned out in Canada:

Clothing and boots for the three services	Marine smoke floats
Personal equipment	Hospital equipment and supplies
Optical instruments	Gas decontamination suits and equipment
Military and naval instruments	Link trainers
Radios, radiolocators	Military furniture and forms
Gas masks	Fire trucks
Steel helmets	Fire hose
Parachutes	Asbestos rescue suits
Flare parachutes	Ammunition boxes
Minesweeping gear	Machine tools
Technical naval equipment	Gauges
Searchlights	Military tires
Smoke projectors	Anti-submarine gear

Predictors for anti-aircraft guns and various secret weapons will soon be produced.

Scientific Research on War Weapons

Note:—For a description of Canadian scientific research on war weapons, see pages 38-39 of the November issue of "Canada at War."

SOME MISCELLANEOUS CONTRIBUTIONS TO THE COMMON CAUSE

Note:—For an account of the miscellaneous ways in which Canada, apart from the major aspects of her war programme, is contributing to the common cause, see pages 40-42 of the November issue of "Canada at War."

CANADA, THE UNITED STATES AND THE WAR

"The loosing in the world of a ruthless brutal force that scoffs at freedom, makes it essential that we (the United States and Canada), who have been an example to all nations in the ways of peace, must again show the world . . . how free men can and will co-operate to protect their common way of life when it is put in jeopardy."

*Colonel Frank Knox, Secretary
of the United States Navy*

Economic Co-operation

Without access to many United States products essential to war manufacture, Canada's war programme could not have progressed as far as it has to-day. Canada buys many essential war materials and machine tools in the United States, and since the outbreak of hostilities has bought them in increasing quantities. In spite of a reduction in the amount of "non-essential" commodities coming to Canada from the United States, Canada's imports from that country have increased greatly since the outbreak of war. In 1938 they were valued at \$425,000,000; in 1939, in September of which year the war began, they rose to \$497,000,000; and in 1940 they soared to \$744,000,000. In the present fiscal year (April 1st, 1941, to March 31st, 1942) they are expected to reach \$953,000,000, of which at least \$428,000,000 will be for war purchases. At the same time it has been estimated that Canada's exports to the United States this fiscal year would run, under normal trade arrangements, to \$475,000,000—which would leave Canada with a trade deficit with the United States of about \$478,000,000.

Canada's United States Dollar Problem

A supply of foreign exchange, particularly United States dollars, is thus vital to Canada's war programme. Canada normally sells the Sterling resulting from her Empire trade in order to get American dollars to cover her trade deficit with the United States. But the war has made this procedure impractical. For Britain has needed most of her gold and American dollars for her own war purchases in the United States, and so has not been able to continue to convert Canadian Sterling credits into United States dollars. Moreover, since the beginning of

the war, Britain has been able to settle only a fraction of her billion dollar trade deficit with Canada by transfer of gold; and since December of last year no gold has been transferred from Britain to Canada.

At the same time Canada's net deficit with the United States, on both current and capital account, has increased. In 1938, the last full year before the war, it was about \$115,000,000. In the year and a half between September 15th, 1939, and March 31st, 1941, it was about \$477,000,000. In the present fiscal year (April 1st, 1941, to March 31st, 1942) it will amount to about \$467,000,000, less whatever reduction is affected under the terms of the Hyde Park Declaration.

Thus, because of greatly increased war purchases in the United States, Canada, since the beginning of the war, has been faced with a widening differential between the amount of U.S. dollars she needs and the supply she is able to command. For, under the terms of the United States Neutrality Act, Canada's vast war purchases in the United States on her own account must be paid for in cash in United States dollars. And at the same time, because of the financial burden which the war has placed on Britain, the Dominion has been unable to make up her exchange deficit with the United States in the normal peace-time manner.

The Hyde Park Declaration

The Hyde Park Declaration was issued following conversations between President Roosevelt and Prime Minister Mackenzie King at the country home of the President, Hyde Park, N.Y., on April 20, 1941. The Declaration established a principle which, it is expected, will reduce Canada's deficit with the United States and enable the Dominion to maintain and increase her war purchases from the Republic. As a result of the agreement, it is expected that Canada will be able to sell to the United States additional defence materials and some articles of war to the value of between \$200,000,000 and \$300,000,000. In addition, the United States is to lend-lease to Britain materials and parts to be shipped to Canada as components in Canadian production for Britain. Canada, herself, is not obtaining supplies from the United States under the lend-lease plan, but is paying cash in American dollars for everything which she purchases in the United States on her own account.

Canadian Exports to United States Increase

Canada has increased her exports of essential raw materials to the United States in the two years since the outbreak of war. Important war metals and minerals, timber, pulpwood, pulp and newsprint have been among the commodities flowing in increasing volume from the Dominion to the Republic. Since the Hyde Park Declaration was issued, arrangements have been made to increase purchases of war materials from Canada by the United States, and, in addition, certain war equipment which Canada produces in substantial quantities.

War equipment which Canada is able to export to the United States and for some of which substantial orders have already been placed, includes certain types of small arms, some guns and ammunition, certain explosives and chemicals, certain armed fighting vehicles, corvettes and mine-sweepers. There are also some types of clothing and textiles, leather, rubber and timber products and various secret devices in which Canada could probably make an important contribution if these were desired.

A Sound Canadian Economy Benefits Americans

Because the American and Canadian economies are very closely joined, Canada's efforts, under the stress of war, to preserve a sound financial position, have been of real benefit to Americans. Measures to safeguard the Canadian economy have protected the \$4,000,000,000 which Americans have invested in Canada. Although it has been necessary to restrict the movement of capital out of Canada, Americans are allowed to withdraw, at the full official rates of exchange, all forms of current income from Canada. During the present fiscal year (April 1st, 1941, to March 31st, 1942) Canada will pay about \$225,000,000 in interest and dividends to United States investors. The attractiveness of Canada as a field of investment has not been impaired by the war, and millions of American dollars have been invested in the Dominion since the outbreak.

Co-ordination of Defence Production

The Hyde Park Declaration has provided the framework for co-ordination of defence production by the United States and Canada.

A Joint Defence Production Committee has recently been established with representative committees from both countries to co-ordinate the resources of the two nations for production of defence material. The committee is surveying the actual and potential productive capacities of the two countries in the interests of common defence. A programme is being formulated to ensure the most rapid supply of war materials from this continent to Britain and her fighting allies. The defence production plan is also being formulated with a view to avoiding maladjustments in the post-war period.

The formation of the Joint Defence Production Committee was recommended by the Joint Economic Committees which were set up about five months ago. The Joint Defence Production Committee has an effective liaison with the Joint Economic Committees and the Joint Materials Co-ordinating Committee. It will have access to studies already initiated by these committees.

Note:—For a note on the work of these committees, see page 45 of November issue of "Canada at War". For "Instances of Economic Co-operation", see pages 73-75 of October issue.

Canada and Western Hemisphere Defence

(See also pages 12, 19-20 and 30-31.)

When Canada went to war two years ago she took immediate steps to ensure the defence of her territory and, subsequently of key points in the western hemisphere. Since the Ogdensburg Agreement of August, 1940, these defensive measures have been co-ordinated with those undertaken by the United States and the two countries have now worked out joint plans for the defence of their part of the western hemisphere. Both Canadian coasts are constantly guarded by large concentrations of troops, by fortresses and by coastal and anti-aircraft guns located at strategic points, as well as by naval and air patrols operating along 2,000 miles of coast line and far out to sea. These air patrols have been strengthened in the past summer. New planes have been provided and new bases have been built.

In the west Canada is also building a string of staging airdromes so that military planes from both Canadian and United States centres can be moved into northern British

Columbia and Alaska without delay. The British Columbia-Yukon-Alaska Highway Commission has reported that it would be practicable from an engineering standpoint to build a highway to connect the United States with Alaska by way of British Columbia and the Yukon. The length of the highway would be 1,700 to 1,900 miles and the probable cost is estimated at \$25,000,000 to \$30,000,000 exclusive of paving.

In the east, United States troops have replaced Canadian forces in Iceland, and they have joined Canadian troops in Newfoundland, where the two countries are building extensive defence facilities. Canada and the United States are in full agreement concerning defence measures in Greenland. Canada has built airdromes in Labrador and elsewhere in the north. Both United States and Canadian troops stand guard in the West Indies. At sea both the Canadian and the United States navies seek out marauding submarines.

Civilian defence and A. R. P. units are organized in many parts of Canada and blackout practices have been held in several cities. The Army and the Royal Canadian Mounted Police guard vital points and operate to prevent fifth column activities and sabotage. The Veterans' Guard plays an important part in this work.

Americans in the Canadian Armed Forces

A direct and striking American contribution to Canada's war effort is the arrival in Canada of American volunteers for the Canadian armed forces. About 10% of the air crew trained or in training in the R. C. A. F. are Americans and 600 Americans are acting as instructors for the Air Training Plan. Every state in "the Union" is now represented in the R.C.A.F. Americans in the R.C.A.F. now wear a distinguishing badge "U.S.A." on the shoulder. About 10,000 Americans are serving with the Canadian Army. Many of these airmen and soldiers have already gone overseas, Americans and Canadians to-day fly together in the R.A.F. and the American "Eagle" squadrons often fly with R.C.A.F. Squadrons.

THE HOME FRONT

"Let us, therefore, gird on the armour of war. Let us prepare with fanatical zeal for any sacrifice that may be required of us. Let us forge a weapon of unbelievable power to strike the sword from the hands of our enemy."

The Earl of Athlone, Governor-General of Canada

The War and the Canadian Economy

Note:—For a discussion of the sort of measures which were taken in the earlier part of the war to protect the Canadian economy and harness it for war, see pages 38 and 43-61 of October issue of "Canada at War." For a description of current economic trends compared with the pre-war situation, see page 47 of the November issue.

Some indication of what Canadians are doing on "the home front" is contained in the other sections of this booklet. The present section is a partial description of the economic side of activity on "the home front."

Economic expansion does not mean that individuals, businesses or the nation as a whole are growing rich because of the war. Business income is subject to a high minimum tax and most of any "excess" profits are taken by the Government. Wages and salaries have been stabilized at prevailing levels, and a general "ceiling" has been placed on prices. Governments are collecting three times as much in taxes as in peace time. Profiteering is "out" in this war. Moreover, with Canada's war industry now in record production, civilian supply of many commodities is becoming limited.

Economic Controls

To ensure maximum supplies of labour, money and materials for Canada's war industry and protect Canadians from the demoralizing effects of inflation, a comprehensive set of wartime economic controls has been established. The diagram on the next page gives a picture of these controls. -

Particularly in the early part of the war, voluntary restrictions, combined with financial measures, played a large part in harnessing the economy. Voluntary restrictions are still necessary. They are, to an important extent, indispensable to the success of the programme of control

CANADA'S WARTIME ECONOMIC CONTROLS

PARLIAMENT

THE GOVERNMENT

(EMPOWERED BY WAR MEASURES ACT, NATIONAL RESOURCES MOBILIZATION ACT AND MUNITIONS AND SUPPLY ACT TO CONTROL PHYSICAL AND HUMAN RESOURCES OF CANADA IN ANY WAY NECESSARY TO SECURITY OF THE STATE)

DEPARTMENT
OF
LABOUR

DEPARTMENT
OF
MUNITIONS
AND SUPPLY

DEPARTMENT
OF
FINANCE

DEPARTMENT
OF
TRADE AND
COMMERCE

NATIONAL
WAR
LABOUR
BOARD

WARTIME
INDUSTRIES
CONTROL
BOARD

WARTIME
PRICES AND
TRADE
BOARD

FOREIGN
EXCHANGE
CONTROL
BOARD

EXPORT
PERMITS
BRANCH

HAS
POWER TO
CONTROL
WAGES

HAS POWER
TO CONTROL
SUPPLY OF
CERTAIN
SPECIFIED
WAR
COMMODI-
TIES

HAS POWER
TO CONTROL
SUPPLY OF
ALL GOODS
AND
SERVICES
OTHER THAN
CERTAIN
SPECIFIED ..
WAR COM-
MODITIES

HAS POWER
TO CONTROL
FOREIGN
EXCHANGE
TRANS-
ACTIONS

HAS
POWER
TO LICENSE
EXPORTS

AND
PRICES OF
ALL GOODS
AND
SERVICES
OF WHAT-
SOEVER
KIND

*Interlocking

being undertaken by the Government. Nevertheless, as Finance Minister Ilsley has declared, unless we are prepared to allow a substantial inflationary rise in prices, "we must have an effectively planned and operated set of controls which will be deliberately designed to restrict civilian consumption and prevent inflation while attaining the objectives of the war programme." In short, Canada's wartime economic problems are now so widespread that they can only be solved by control which is increasingly mandatory and general. Rising prices, heavier demand for raw materials, more acute transportation difficulties and increasing problems of labour supply, are among the factors which, combined with the increasing magnitude of Canada's war industry, make more rigid controls necessary.

Controlling Prices

One of the most important of the Government's economic controls is the price "ceiling" placed upon goods and services. It is administered by the Wartime Prices and Trade Board. By Order in Council under the War Measures Act, on and after December 1st the level of prices may not exceed the level which prevailed in the period of September 15th to October 11th.

The Order covers all commodities (unless specifically exempt) and twelve essential services. The latter include all public utilities, transportation and allied services as well as miscellaneous services such as laundering, hair-dressing, repairing, painting, plumbing, motion pictures, etc. There is also a special ceiling order respecting rentals.

The price control is supplementary and complementary to the wage ceiling, and along with the latter is designed to check the inflationary spiral of prices and wages. The Government has chosen to implement a general ceiling over all prices because it believes war-inspired price increases have become too general for any selective control of prices or piece-meal methods.

Increasing the prices of an article higher than that prevailing during the basic period is a criminal offence. Nor can workmanship, or the quality of goods or materials, be lowered. Such a device to skirt the regulations is an offence punishable by fine or imprisonment.

The setting of retail prices will necessitate some adjustments if the retail merchant is not to suffer unduly from the Order. The intention is that if there is a "squeeze" between the cost of raw materials (or imported semi-finished materials) and the retailer's selling price of the finished article, everybody in the industry from retailer back to manufacturer or importer, should bear his fair share of the burden, but no more than his fair share. If the total burden is too great, in fairness to the industry as a whole, the Board will investigate, and, if it is found necessary, will recommend that the Government, representing the people as a whole, should also take a share of the burden by way of a subsidy, or by controlling the price of raw materials, or by reducing import duties, or in some other appropriate way.

Business has been charged with a large measure of responsibility for administering the scheme. The control authority calls it "self-regulation." Representatives of all branches of production and distribution have been appointed as administrators and directors by the Wartime Prices and Trade Board.

Farm and fish products price-fixing is subject to a special method of administration. Sales by primary producers to processors and dealers are not subject to the price ceiling in the case of livestock, poultry, eggs, milk, cream, dairy butter, farm-made cheese, honey, maple syrup and fish. Where the farmer sells directly to the consumer, however, prices will be fixed on the basic period, and the ceiling also applies on sales by processors and dealers.

All war industries are specifically exempt from price control. No consideration of costs will prevent the ever-increasing flow of tanks, planes, and guns from rolling off Canada's assembly lines. The industrial war effort will not be lessened in any way. To ensure certain vital industries against handicaps, imported mining, milling, manufacturing and construction machinery will be exempted.

Export sales will not be controlled as to prices. Sales of Canadian products to the United States, which gain valuable United States dollars to buy vital war materials, are not affected in any way.

Imported goods will, in general, cost the importer no more than is appropriate in relation to the retail ceiling prices, according to the import policy announced to implement the price ceiling. Importers may continue importing in the normal manner, with assurance that appropriate subsidies will be provided on goods imported on or after December 1, 1941. A system of direct subsidies is being used in the first instance, with the possibility that from time to time duties and taxes on imported goods may be reduced in such a way as to make subsidies unnecessary. This general policy will be supervised and handled by a Commodity Prices Stabilization Corporation under the chairmanship of Hector B. McKinnon. The purpose of the import policy is to enable manufacturers and other importers to continue to supply retailers at prices which are reasonable in relation to the retailers' ceiling prices for sales to consumers. Direct imports by retailers will also be eligible for subsidies, but not direct imports by consumers.

The Wartime Prices and Trade Board, which will administer the schemes, consists of eleven members, representing all departments of Government and agencies most directly concerned in price control. There are thirteen regional offices of the Board across the Dominion, administering and policing the scheme and directly responsible to headquarters in Ottawa.

Appealing to Canadians for aid in making the price ceiling effective, Donald Gordon, chairman of the Wartime Prices and Trade Board recently stated: "And so every person in Canada has a part in this job of obeying and guarding the law. Every consumer, every housewife, every farmer, every retailer, every wholesaler, every manufacturer, has a definite part—and a definite stake in the result. That the price ceiling law will bring hardship to some of you, I do not deny. It *will* bring hardship, but I tell you that no person will be hurt by this policy as he would be hurt by inflation. *The price ceiling means hardship; inflation means ruin.*"

Supply

The Wartime Industries Control Board and the Wartime Prices and Trade Board exercise a joint control over the supply of all goods and services. (See page 55.) The major steps which have so far been taken by these bodies, and by other offices of the Government, to divert essential supplies to war purposes, are here indicated.

Applying Priorities, Reducing Production of Durable Consumers' Goods, and Curbing Instalment Buying

See pages 53-54 of November issue

Machine Tools

Designs are "frozen" on Canadian manufactures of anything from automobiles to sewing machines in which a change of model would require new tooling. The output of the Canadian machine tool industry was small before the war, but in 1940 it jumped about 800% over 1939, and steps taken this year are further increasing output. Canadian plants have been particularly active in the manufacture of machine tools for gun and shell production. Canada normally imports most of her machine tools from the United States. These imports have increased markedly since the outbreak of war, and import permits are required for privately imported machines. Machine tools can be exported only under license. The "bits and pieces" programme is increasing the number of machine tools being used for war manufacture. Citadel Merchandising Company Limited supervises the purchase and distribution of machine tools. During the quarter ended September 30th last, this company purchased machinery and machine tools to the value of \$23,400,000. Since it commenced operation, this company has purchased and distributed machine tools to a total value of about \$60,000,000.

Construction

Construction and repair of buildings costing more than a fixed amount can be carried out only under licence and is limited almost entirely to projects essential to the prosecution of the war. The construction industry throughout the past two years has been one of the busiest in Canada. It has constructed some 250 factory developments, scores

of which are entirely new plants, and some of which contain as many as 40 buildings. Construction contracts totalling \$146,000,000 have been awarded for work for the Army, Navy and Air Force and the Air Training Plan, as well as for harbour works, and extensions or additions to aircraft manufacturing plants, and for other purposes. A total of 108 new airports have been built and another 31 are under construction. Construction of airports, including buildings, etc. has involved an expenditure of about \$180,000,000. More than 100 airports have been equipped for night flying. At present Canada's construction industry is at work, not only in settled areas, but also in places far from human habitation. Construction for the armed forces is still proceeding apace, and airports are being built in Newfoundland, Labrador and in British Columbia. Nearly 5,000 houses of various types are to be built for war workers. Construction is now proceeding on some 3,000 such buildings.

Transportation

Priority has been given to the movement of troops and essential war supplies by rail or water in Canada and on the sea. All Canadian merchant shipping has been placed under Government control. Besides all ocean-going merchant vessels which could be spared, a large number of Great Lakes vessels, a number of vessels of special type, such as salvage vessels, and a considerable number of tankers have been made available to Britain. Arrangements have been made to transfer Canadian Lakes vessels to coastal work this winter, in order that coastal ships may be freed for deep-sea duties.

Increasing numbers of merchant seamen are being trained in Canada. Training of merchant marine officers, now carried out at a number of points across Canada, is being expanded, and schools for seamen are being established, one to train able-bodied seamen, the other to train stokers, firemen and engine-room workers. Seamen in training will receive part of their instruction afloat. Seamen's training schools will be established on both coasts. These schools supplement the seamen's manning pools, where sailors waiting for ships are lodged at full rates of pay. Two manning pools are already in operation; one of them is being enlarged and a third is to be built.

Electric Power

Electric power supply has been increased in certain heavily industrialized areas. Highly important in this connection are arrangements between Canada and the United States for utilization of a maximum amount of water-power at Niagara. The industrialized areas of Ontario and Quebec, where the demand for power is now extremely heavy, have been on daylight saving time since the spring of 1940.

Use of electric power for steam purposes has been banned and coal boiler installations have been made, making electric power available for war industry. Certain non-war industries have been forced to reduce consumption of power during peak hours. In central areas all power systems have been interconnected, so as to permit excess power in one area of the country to be used in other areas as required. Many improvements in plants have been arranged to ensure maximum production of power from all capacity.

Oil

Canada is fifth among the oil consuming countries of the world. Domestic production in Alberta has been considerably increased since the outbreak of war and large-scale exploratory work has recently been carried out in that province. But at present Canada produces only about 15% of the oil she needs, and industry and the forces are making increasingly heavy demands and imports have been reduced because tankers have been diverted to Britain. Since July 15, 1941, sale of gasoline and oil to motorists has been prohibited on Sundays and on week days between 7 p.m. and 7 a.m. Grades of gasoline for use by the public are limited to two.

Coupon books are being printed preparatory to the introduction of gasoline rationing. The Minister of Munitions and Supply, Hon. C. D. Howe, stated on November 7th, "We have been conserving gasoline because if we give it to the pleasure driver we go short in the war effort. The United States furnished a large number of tankers to the British government and Canada furnished its share, a fair number of our Norwegian flag tankers. The United States is getting a number of its tankers back; we are not getting any of ours back. At the moment the situation in Canada is no better, because we have no more new tanker space; our stocks to-day are lower than they have ever

been since the war started. But we have the Montreal pipeline coming into operation, which will help somewhat, and we know that as soon as the situation in the United States is squared away they will give us some help. We hope the situation this winter will be better." But a shortage is likely to occur next spring, the Minister said. "The submarines are out again," he stated, "winter is coming on, and the prospects are not too bright. If there are sinkings in anything like the proportion of last winter, there will be another shortage in the spring. Through a system of rationing, we shall be able to distribute the gasoline not required by the war effort to the citizens of Canada for non-war purposes as equitably as possible."

Pending introduction of rationing, regulations cutting supply of gasoline to service stations by about 20% have been suspended. Restrictions on hours of sale will be continued. This decision has been reached in view of the decrease in gasoline consumption which has been brought about by voluntary conservation and because the winter months naturally curb the use of gasoline for pleasure driving. It is also felt that the regulations curbing deliveries to service stations were not an equitable form of rationing.

Coal and Coke

See page 56 of November issue

Timber

The entire Canadian industry has been organized so that centralized buying for Government projects is effected as economically as possible. In May, 1941, domestic prices for timber, lumber and millwork were fixed at the April 1st, 1941, level, and price-fixing has since been extended to other lines. The Controller also has entire power to direct the sale, storage and movement of timber stock, should this power need to be exercised.

Various steps have been taken to ensure the most economical and efficient use of both Canadian and imported timber. Millions of dollars have been saved by using less expensive woods for many purposes. U.S. dollars have been conserved by the substitution of Canadian for American woods in Canadian construction where possible. In many instances it has been possible to substitute wood for steel, thus saving not only steel but also American

dollars. Every effort has been made to increase Canadian production of hardwoods and imports of hardwoods from Empire countries.

Steel and Iron

By the first quarter of 1942 Canada's annual steel production capacity will be more than double what it was in 1939. Despite enlarged capacity Canada must import substantial quantities of steel from sources outside the Dominion. Such imports must now be confined almost wholly to war requirements. Imports of iron and steel scrap have considerably increased.

Unless authorized by the Steel Controller, steel is delivered only to essential industries. Civilian consumption has been curtailed. A system of indexing consumers' requirements is now in operation. Structural shapes have been reduced in number from 267 to 70, and rolling mill schedules must be approved by the Steel Controller, who must also approve all orders for pig iron. Apart from the action of the Steel Controller, the civilian use of steel is limited by the operations of the Controller of Construction, the Machine Tools Controller and the Controller of Supplies. Rigid control of steel is necessary because supply is insufficient to meet the very large demands of war orders and domestic requirements.

Metals

Not only has mineral (including metal) production increased since the outbreak of war; measures have also been taken to conserve for essential purposes all available supplies of metals which are in demand for defence purposes in Canada, Britain or the United States. Aluminum, nickel, zinc, copper, tin and magnesium are among the metals which are now being restricted to essential uses.

The extent to which such measures are being successfully applied in the case of three key metals is indicated by the following figures:

	1940		Estimated 1941	
	Essential	Non-Essential	Essential	Non-Essential
	Use	Use	Use	Use
Aluminum	73	27	98	2
Nickel	60	40	85	15
Zinc	36	64	75	25

On November 24th, the Minister of Munitions and Supply stated, "still further reductions in non-essential domestic consumption, which ultimately will affect the production of virtually every article in daily use, are imperative." Canadians are being urged by the Metals Controller to conserve valuable metals: existing equipment is to be used as long as possible, every source of supply for necessary replacements is to be explored thoroughly, and scrap is to be carefully salvaged. The Metals Controller has warned that shortages will become increasingly apparent in the supplies of pots and pans, aluminum foil, lighting reflectors, and similar articles. Similarly, wartime copper, zinc, and brass requirements must take precedence over such articles as automobile parts, lighting fixtures, eavestroughing and roofing, zinc oxide for cosmetics, paints, pipe and wire, zippers, jewelry, gifts, novelties, and toys. The Controller has also indicated that nickel plating, sinks, chrome-trimmed furniture, ice skates and other items with a nickel content must yield to wartime needs. He has stated that some progress has been made in developing substitutes for metals in certain manufacturing processes. Plastics are becoming increasingly important in this field, although the shortages of many of the chemical components required are as acute as those of metals.

Scrap, Chemicals, Miscellaneous and the Necessaries of Life

See page 58 of November issue

Labour

Government Labour Policy

Canadian war labour policy is aimed at avoidance of industrial strife and the utmost acceleration of production.

Fundamental principles of the policy to avoid labour unrest are:

1. There should be no interruption of work because of strikes or lockouts.
2. Employees should be free to organize in trade unions, free from control by employers or their agents and to negotiate with employers through their own representatives with a view to the conclusion of a collective agreement.

3. Workers should neither coerce nor intimidate any person to join their organization.
4. Fair wages, working conditions, hours of work and health and safety safeguards should be maintained.
5. Hours of work should not be unduly extended and increased output should be secured by using additional shifts.
6. Any necessary suspension of established labour conditions to speed up war production should be effected by mutual agreement and should apply only during the emergency.

In order that war industries will not be hampered by labour moving from one job to another, the movement of workers in war industries is restricted. No worker in a war industry may move to another job unless the worker is a skilled tradesman not actually employed at his trade. Civilian employees of the British Commonwealth Air Training Plan are included in the order.

Wages

No employer may increase or decrease basic wage rates unless authorized to do so by the National War Labour Board on which Government, labour and employers are represented. This permission can be given only in cases where the Board has found the wage rates to be low. Excepted from this regulation are employers in agriculture, horticulture, fishing, hunting or trapping; also hospitals or religious, charitable or educational institutions operating on a non-profit basis, as well as Dominion and Provincial governments and municipalities.

To adjust wages to wartime price levels, it has been ordered that after February 15, 1942, every employer to whom the wage "ceiling" applies must pay a cost-of-living bonus to all employees, except those above the rank of foreman. The cost of living in Canada is now about 15.4% higher than before the war. Over 750,000 employees are receiving the living bonus.

Managerial, executive and other salaries for those above the rank of foreman or comparable positions are stabilized. Employers shall not increase salary rates paid to salaried employees higher than the rate established before November 7. Increases made since November 6 will have

to be adjusted and probably cancelled. Salaries are defined to include bonuses and all other forms of income received from an employer. The order does not require payment of a cost-of-living bonus, as required for wage earners. It does permit, however, payment of the living bonus to employees receiving less than \$3,000 annually. The same scale of bonus payments applies to this class of salaried employee as to wage earners. Promotion of salaried officials, where a salary increase is involved, requires the approval of the Minister of National Revenue.

The wage and salary stabilization plan is linked to control of prices, and to measures to restrict profits. It is an integral and vital part of Canada's attack on the inflationary spiral of prices and wages.

Labour Relations

Machinery for settlement of industrial disputes dates back to the Industrial Disputes Investigation Act of 1907. The act applied originally to disputes in mines and industries connected with public utilities, but was extended early in 1939 to include all war industries.

Under regulations now in force, disputes arising in war industries, if not settled otherwise, must be referred to a conciliation board. No strike action may be taken until after the report of the conciliation board has been released and then only if a vote is taken under Department of Labour auspices and a majority of those eligible to vote favour a strike.

Labour Supply

Labour supply will ultimately be the most general and difficult shortage faced by Canadian war industry. Hence labour supply problems are receiving close attention from a number of agencies—the National Labour Supply Council, the Labour Co-ordination Committee, the Wartime Bureau of Technical Personnel and the War Emergency Training Programme.

The Wartime Bureau of Technical Personnel has a register of technically trained personnel and encourages the transfer of experts from non-war to war work and the training of men for war jobs in the shops of established plants. At least five of Canada's leading industrial groups (the mining, petroleum, public utilities, textile, and pulp

and paper industries) are co-operating in this latter work. The War Emergency Training Programme is training thousands of previously unskilled workers in about 100 technical and special training centres throughout the country. To the end of October this year about 52,000 had been trained in these schools and centres. Of these 29,500 were industrial workers and the rest were trained for the armed forces. In addition over 71,000 were trained by industry itself. About 130,000 will be trained for industry and the armed forces this year.

It is estimated that since the beginning of the war about 750,000 new wage earners have been employed. The number employed in durable goods industries has almost doubled. Many thousands of women are now employed in factories which manufacture shells, ammunition, guns, airplanes and other war equipment. However, only a part of the man and woman power that will ultimately be required to carry out Canada's industrial war programme is now engaged in the production of munitions and war equipment. It is expected that war industries will draw increasingly on peace-time occupations during the coming months, and that more women not normally employed will be entering industrial or commercial work.

Controlling Foreign Exchange Transactions and Exports

Note:—For a discussion of the major steps Canada has taken to control foreign exchange transactions, particularly with reference to Canada's United States dollar problem, and for a brief note on "Controlling Exports", see pages 60-62 of the November issue of "Canada at War."

Financial Undertakings

Note:—For a full discussion of Canada's wartime financial undertakings, including spending, taxation and war loans and savings, and for an account of the "pay-as-you-go" policy, see pages 63-67 of the November issue of "Canada at War."

The Director of Public Information also publishes a condensed version of this booklet—an eight page leaflet entitled "Canada's War Record." Persons who wish to be placed on a mailing list to receive either of these publications monthly, should apply to the Director of Public Information, Ottawa, Canada.

A FEW STRIKING FACTS ABOUT CANADA'S WAR EFFORT

- The amount of money Canadians are spending for war purposes this fiscal year will amount to considerably more than Canada's total war expenditure during more than four years of the last Great War
- It will be equal to about 40% of the estimated national income in the present fiscal year
- It means a daily expenditure for war of nearly \$4,000,000
- The Dominion Government is spending about five times as much in the present fiscal year as it spent in the last full fiscal year before the war
- Five times as many people as before the war are paying five times as much in income taxes of all kinds
- Married persons with incomes from \$3,000 to \$10,000 a year pay from eleven to four times as much in income taxes as before the war
- Nearly 130,000 workers have been trained in skills useful to the war effort this year
- About 750,000 new wage-earners have been employed since the outbreak of war
- The British Commonwealth Air Training Plan will cost Canada in the first three years of its operation a sum of money about equal to the total collected in taxes by the Dominion Government in a normal peace-time year
- It operates a number of planes almost equal to the number of men enrolled in the Air Force before the war
- Canadian exports are about 80% higher than before the war and imports are up about 100%
- Manufacturing production has increased about 47%
- Thirteen times as many men as before the war are employed in shipbuilding, 34 times as many in aircraft manufacture
- This year alone the total production of explosives in Canada will equal the entire Canadian output during the whole of the first Great War
- Canadian army vehicles have been used in every campaign in which Empire forces have participated.
- Canada is spending more per capita to make food cheap for British consumers than is being spent for this purpose by the British Government
- In recent months the Royal Canadian Navy has been taking on new ships at the rate of two a week
- It has assisted in convoying 7,000 ships across the Atlantic
- Nearly half of Canada's expenditure on her own war programme this fiscal year has been ear-marked for the Army
- Every state in the American "Union" is represented among the volunteers who have come north to join the R.C.A.F.

CANADA "LEND-LEASES"

TO BRITAIN

During the first two years of the war, apart from British goods sent to Canada, Britain needed more than a billion dollars to cover her purchases in the Dominion.

Britain paid less than a quarter of this sum in gold, but Canada had to send more gold than this to the United States in order to fill her British orders. Canadians supplied the rest—\$905,000,000.

During the present fiscal year (April 1st, 1941, to March 31st, 1942,) Canada will export goods and war equipment to Britain to the value of \$1,500,000,000. Canadians will provide Britain with all the Canadian dollars she will need to finance these purchases.

The Dominion, it is clear, is not demanding "cash on the barrel-head" for her aid to Britain.

CANADA PAYS CASH FOR AMERICAN SUPPLIES

Canada has bought increasingly large amounts of war supplies in the United States. In 1939 her imports from the United States were valued at \$497,000,000. In 1940 they soared to \$744,000,000. In the present fiscal year (April 1st, 1941, to March 31st, 1942) they are expected to reach \$953,000,000. Of this amount at least \$428,000,000 will be spent on war supplies, some of which will be materials and parts to be manufactured in Canada for Britain. The latter are being transferred to Britain via Canada under the lend-lease plan. But Canada, herself, is not obtaining supplies under the plan. She pays cash for her own purchases in the United States.

CANADA SENDS TROOPS OVERSEAS

Canada has sent more than 150,000 volunteer soldiers, sailors and airmen overseas. The Dominion now has four army divisions, one of them armoured, and a tank brigade serving outside Canada, and well over 300 additional units numbering scores of thousands of men; by the end of this year the number of Canadian airmen overseas will be equal to a division of infantry; and Canadian naval vessels are playing an effective part in the war at sea. Canadian troops are in widely scattered parts of the world—in the Far East, in Gibraltar, in Britain, in Canada and in North American outposts such as Newfoundland and the West Indies. Canadian naval ships are separated by 10,000 miles of land and sea. Canadian airmen are fighting wherever the R.A.F. is fighting.

CANADA DRAFTS MEN FOR HOME DEFENCE

Canada is now drafting men 21 to 24 years of age, who have not already joined one of the forces, for home defence for the duration of the war. During their four months' basic training they are given an opportunity to volunteer for service anywhere with the Navy, Army or Air Force. Of nearly 30,000 who have so far been drafted, about one third have volunteered for service anywhere. Most of the rest have been posted to home defence duties. Postponements have been granted to key workers in war industries, and in a few other cases where it was in the public interest to do so.

Thus, men aged 21 to 24 are being called for full-time service with the armed forces at home, or abroad if they volunteer for such duty. By law, all men aged 19 to 45 who were single in July, 1940, are liable to be so called.

SOME OF THE WAR'S EFFECTS ON CANADIAN CIVILIANS

See page 70 of November issue

***“We are all united in a
common effort. Intolerance,
bigotry and hate have no
place in the national picture.”***

*The late Rt. Hon. Ernest Lapointe,
former Minister of Justice in the
Dominion Cabinet.*